

PESTICIDE EPISODE INVESTIGATION REPORT

RECEIVED BY Ramage, Laura	RECEIVED FROM Residents	REPRESENTING Dove Creek Comm	DATE/TIME RECEIVED 7/10/19 2:45	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	PERSON NOTIFIED DFA _____	DATE _____
TYPE OF EPISODE <input type="checkbox"/> HUMAN EFFECTS # _____ <input type="checkbox"/> PROPERTY LOSS \$ _____		<input checked="" type="checkbox"/> ENVIRONMENTAL EFFECTS <input type="checkbox"/> OTHER		PRIORITY INVESTIGATION <input type="checkbox"/> YES # _____ <input checked="" type="checkbox"/> NO		
OTHER I.D. NO. 40-20190830-035	COUNTY OF OCCURRENCE San Luis Obispo	DATE OF OCCURRENCE MO 10 DAY 01 YR 18	TIME 00:00	<input type="checkbox"/> AM <input type="checkbox"/> PM	DFG _____	_____
EPISODE LOCATION Dove Creek Community, Atascadero, CA					DHS _____	_____
					DIR _____	_____
					EPA _____	_____
					CAC _____	_____
					OTHER _____	_____

INJURED/COMPLAINANT INFORMATION

COMPLAINT SIGNED <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	DR. VISITED <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	EXTENT OF INJURY/ILLNESS <input type="checkbox"/> Fatal <input type="checkbox"/> Symptoms <input type="checkbox"/> Serious <input type="checkbox"/> Exposed Only	ACTIVITY OF PERSON EXPOSED/INVOLVED <input type="checkbox"/> Mixer/Loader <input type="checkbox"/> Field worker* <input type="checkbox"/> Applicator <input type="checkbox"/> Public* <input type="checkbox"/> Other* Explain _____
NAME Multiple Residents	AGE _____	SEX _____	WHS NO. _____
ADDRESS Residences in Dove Creek Community	CITY Atascadero	ZIP 93422	PHONE _____
MEDICAL FACILITY NAME NA	<input type="checkbox"/> TREATMENT PROVIDED <input type="checkbox"/> OBSERVATION ONLY	HOSPITALIZED <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE/TIME ADMITTED _____ DATE/TIME DISCHARGED _____
PHYSICIAN NA	ADDRESS _____	PHONE _____	
SIGNS/SYMPTOMS EXPERIENCED NA			
EMPLOYER NA	ADDRESS _____	PHONE _____	

PROTECTIVE MEASURES USED	EYES <input type="checkbox"/> Safety Glasses <input type="checkbox"/> Goggles <input type="checkbox"/> Faceshield <input type="checkbox"/> Eye/Sun Glasses <input type="checkbox"/> None	HANDS <input type="checkbox"/> Cloth/Leather Gloves <input type="checkbox"/> Chem. Resistant Gloves <input type="checkbox"/> Other _____ <input type="checkbox"/> None	INHALATION <input type="checkbox"/> Dust Mask <input type="checkbox"/> 1/2 Face Respirator <input type="checkbox"/> Full Face Respirator <input type="checkbox"/> SCBA <input type="checkbox"/> None	OTHER <input type="checkbox"/> Work Clothes <input type="checkbox"/> Coveralls _____ <input type="checkbox"/> Chem. Resistant Clothes <input type="checkbox"/> Chem. Resistant Boots <input type="checkbox"/> Head Covering <input type="checkbox"/> Other _____	ENGINEERING CONTROLS <input type="checkbox"/> Closed System <input type="checkbox"/> Enclosed Cab <input type="checkbox"/> Enc. Cab w/Air Purification <input type="checkbox"/> Other _____ <input type="checkbox"/> None
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ENVIRONMENTAL OR PROPERTY DAMAGE

DESCRIPTION OF DAMAGE Sprayed Herbicide throughout wetland killing millions of frogs & wildlife.	AMOUNT/VALUE NA
OWNER Dove Greek Housing Development	ADDRESS 11305 Cuervo Way, Atascadero
PHONE _____	PHONE _____
ALLEGED RESPONDENT(S) <input type="checkbox"/> PCA <input type="checkbox"/> DEALER <input type="checkbox"/> PILOT <input type="checkbox"/> GROWER <input type="checkbox"/> AGENCY <input checked="" type="checkbox"/> OTHER*	
NAME Martinelli Landscape Construction	PHONE 805-434-0506
LICENSE/PERMIT NO. 36206	RECOMMENDATION MADE <input type="checkbox"/> YES # _____ <input checked="" type="checkbox"/> NO
ADDRESS P.O. Box 1256	EMPLOYER'S NAME Chris Martinelli
PHONE _____	PHONE 805-434-0503
CITY Templeton	STATE CA
ZIP 93465	EMPLOYER'S ADDRESS Same
EXPLAIN*	CITY _____ STATE _____ ZIP _____

PESTICIDE NAME/MANUFACTURER	EPA REGISTRATION NUMBER	CATEGORY	DOSE/DILUTION/VOLUME	TREATMENT DATE	COMMODITY/SITE TREATED
Speed Zone/Gordon's Pro	2217-835-ZA	Caution	14.5 oz/appl	October	Landscape
Cornerstone Plus/Winfield	74530-43-AA-1381	Caution	7.25 oz/appl	October	Landscape

EQUIPMENT TYPE/MAKE/MODEL/DESCRIPTION

SUMMARIZE THE EPISODE INCLUDING A DETAILED DESCRIPTION OF EVIDENCE TAKEN (Use Episode Report Supplement Form PR-ENF-127A If Additional Space Is Needed)

On July 10, 2019, the San Luis Obispo County Agriculture Commissioner's Office received a call from a concerned resident in the Dove Creek Housing Community. The complaint was in regards to herbicides being sprayed in areas that should be protected and concerns over the landscape company not being properly licensed. On August 15, 2019 another resident contacted our office and claimed that the Dove Creek Housing Development had sprayed roundup and other pesticides throughout the wetland areas killing millions of frogs and other wildlife. Complaint stated the spraying was done last year in October of 2018. (This case is a continuation of INV-40-20190830-034. Refere to attached narrative.)

REPORT PREPARED BY (NAME/TITLE) Laura Ramage/Ag Insp. Bio. III	DATE PREPARED 9/9/19	REPORT REVIEWED/APPROVED BY (NAME/TITLE) Tom Morgan/Deputy Ag. Comm.	DATE APPROVED _____
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Print Form

STATE OF CALIFORNIA
PESTICIDE EPISODE INVESTIGATION
SUPPLEMENTAL REPORT

DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE ENFORCEMENT BRANCH

PR-ENF-127A (EST. 10/91)

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LOCATION/SUBJECT	PRIORITY/WHS NO	OTHER I.D. NO.	COUNTY OF OCCURRENCE	DATE OF OCCURRENCE
Dove Creek	NA	INV-40-20190619-035	San Luis Obispo	06/25/2019
REPORT TYPE				
<input checked="" type="checkbox"/> NARRATIVE CONTINUATION <input type="checkbox"/> SUPPLEMENTAL REPORT <input type="checkbox"/> OTHER REPORT				

REMARKS

June 25, 2019

Tom Morgan, Deputy Agricultural Commissioner of the San Luis Obispo County Agricultural Commissioner's Office received a Complaint Report #COMP-43570 from Cal EPA (See **Attachment A- Cal EPA Complaint Report**). The complaint alleges;

"Dove Creek Housing Development is adjacent to wetland and even after I warned them they sprayed roundup and other pesticides not only in Dove Creek but throughout the wetland killing millions of frogs and other wildlife. Done possible before and done last year around October 2018, Huge frog kill off and they even sprayed in wetland."

0941 hrs.

Morgan forwarded the report to me, Laura Ramage, Agriculture Inspector Biologist (AIB).

1300 hrs.

I responded to the site of the alleged contamination, Dove Creek Community located between Santa Barbara Road to the South, San Diego Way to the North, Highway 101 to the West and El Camino Real to the East. (See **Attachment B- Dove Creek Community Map**) While on site, I noticed the areas where a non-selective herbicide had been sprayed within landscaped areas near the residential homes and along walking paths. Workers were in the process of string-line trimming much of the areas near sensitive and un-landscaped areas. I walked through the entire Dove Creek Community looking for signs or wildlife kill or any appearance of improper herbicide application. It appeared as though the creek that seasonally flows through the community had been dry for a while. (See **Attachment C- Photos of Dove Creek Community**)

1430 hrs.

I returned to my office and determined that Goetz Manderley is the company that manages the Dove Creek Community. A quick call to the company informed me that Martinelli Landscape is the only landscape contractor they utilize to perform work and control weeds within this community. A representative from Goetz Manderley gave me the contact information for [REDACTED] who was a representative for the Dove Creek Home Owners' Association.

Martinelli Landscape is a licensed maintenance gardener business #36206 and registered with San Luis Obispo County on January 11, 2019. A review of the use reports submitted for October of 2018 showed two herbicide products had been used; Cornerstone Plus, EPA Reg. #74530-43-AA-1381 and Speed Zone, EPA Reg. #2217-835-ZA. (See **Attachment D- Cornerstone Plus Label, Attachment E- Speed Zone Label, and Attachment F- Martinelli October Pesticide Use Report**) A label review showed both products would be appropriate to use in the Dove Creek Community as long as the use was not applied directly to water or to areas where surface water was present.

I contacted [REDACTED] Martinelli to determine if the herbicide use had been appropriate. Martinelli mentioned there were mitigations in place due to the nature of the wetlands and potential habitat for the California Red-Legged Frog. He had been directed not to apply herbicides within 25 feet of the wetlands.

1630 hrs.

I sent an email to California Department of Fish and Wildlife (CDFW) Warden, Matt Gil, to request assistance on assessing any impacts to wildlife in the wetlands in Dove Creek Community.

There was no contact information on the Cal EPA complaint, therefore I was not able to reach out to the complainant for more information. I closed this investigation. (See **Attachment G- Investigation #40-20190830-034**)

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REPORT TYPE				
<input checked="" type="checkbox"/> NARRATIVE CONTINUATION		<input type="checkbox"/> SUPPLEMENTAL REPORT		<input type="checkbox"/> OTHER REPORT

REMARKS

July 10, 2019

1445 hrs.

Krysti Jerdin, Administrative Assistant, received a phone call from [REDACTED] [REDACTED] wanted to have our department follow up on her concerns with herbicide applications made to the Dove Creek Community. Specifically, the notification of residence in the community when a spray application was to occur, concerns she had regarding spraying in the wetlands, and concerns about Martinelli Landscape not being licensed.

1500 hrs.

I contacted [REDACTED] to address her concerns. Our conversation is summarized below:

[REDACTED] said notification had been provided to residents prior to herbicide applications in the community, however the application had been postponed for a couple of days and re-notification had not occurred. A new process had been added this year in which residents could opt out of having their yards sprayed by mailing back a postcard. Her concerns were for the people with pets and children who go along behind the application in the common areas and do not realize an herbicide had just been sprayed. She was also concerned about the proximity of applications to the wetland areas. She was not certain a buffer was being observed. I asked her if she had concerns over wildlife kill, she said she had not witnessed any impacts to the wildlife.

1515 hrs.

I contacted Martinelli to address [REDACTED] concerns and to see if he could provide me with a copy of the mitigations from the original plan proposed prior to Dove Creek Communities' development. Martinelli informs the Dove Creek HOA of their intentions to spray and then the HOA posts the notifications for the homeowners. Martinelli stated crews stay on site until the product has dried to make sure no one is exposed even though they are not required to in public areas.

1530 hrs.

I contacted [REDACTED] of the Dove Creek HOA to address [REDACTED] concerns as well and to let him know I intended to work with CDFW to make sure mitigations were being observed. He was concerned about the expense since they had paid for a wetland mitigation monitoring report provided by Althouse and Meade, Inc. in December of 2015. I assured him there was no charge involved, but I did ask him if he could provide me with that report.

1543 hrs.

I received the *Wetland Mitigation Monitoring Report: Year 5, December 2015*, from Hobbs. **(See Attachment H- Wetland Mitigation Monitoring Report)**

July 15, 2019

1133 hrs.

I again sent an email out to Gill of CDFW to see if I could meet with a biologist to have them assess the mitigations being observed currently.

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<input checked="" type="checkbox"/> NARRATIVE CONTINUATION				
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<input type="checkbox"/> OTHER REPORT				

REMARKS

July 22, 2019

0930 hrs.

I sent an email to Bob Stafford, Environmental Program Manager, with CDFW asking for assistance with an assessment at Dove Creek.

0946 hrs.

Stafford replied to my email stating Gil may be involved if there was any enforcement required, or Brandon Sanderson if an assessment was necessary.

August 15, 2019

1430 hrs.

James Moore, AIB, received a call from a concerned homeowner in the Dove Creek Community. [REDACTED] had concerns about the application of Roundup to the residential areas and wetlands, she didn't understand why LA County had banned the use of Roundup and our county hadn't. She stated to Moore that millions of frogs had been killed. Moore sent [REDACTED] a document explaining the situation in LA County and how it was a decision the county made in regard to their own properties. Moore told [REDACTED] someone from the Templeton field office would be returning her call.

1500 hrs.

I called Gil from CDFW, he suggested I call Sanderson, Environmental Scientist in the Habitat Conservation Planning Division.

1515 hrs.

I called Sanderson and left a message suggesting we meet at Dove Creek Community to assess the wetland areas and current mitigations.

1530 hrs.

I left [REDACTED] a message stating I was working with CDFW to assess the area, and that I had not found any violations of pesticide laws or regulations up until this time.

August 20, 2019

1415 hrs.

Sanderson returned my call. We set up a meeting for the morning of August 28, 2019 to assess the Dove Creek Communities concerns.

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REMARKS

August 28, 2019

0840 hrs.

I met with Sanderson at the Dove Creek Community. We walked through the entire development. We were able to locate a spring and other areas where water was collecting and found healthy and thriving frog populations. We did not see any signs of deceased wildlife. **(See Attachment I- Photos of Wetland Areas with Frog Populations)** Most all of Dove Creek was dry and Sanderson suggested the frog populations were moving to the moist areas of the spring and filtration greenbelt areas that are irrigated. I asked him why citizens would assume frog populations had been killed. Sanderson suggested that perhaps it was because the frogs would not be calling this time of year as only the males sing and only during their mating season which is winter into early spring.

Sanderson had no concerns with the wetland areas or mitigations as they were in place. He had some suggestions for me to relay to Martinelli which are as follows;

1. Areas that are considered greenbelts/retention basins are overflow buffers between the residences and the wetlands. This area is designed to filter and clean the runoff water before it is discharged into the wetlands. If these areas are treated with herbicides, they must be treated with products approved for aquatic areas.
2. In the *Wetland Mitigation Monitoring Report: Year 5, December 2015*, Section 6.0 bullet point #4 a required action is that "invasive weeds may be removed by hand or with the appropriate spot-sprayed herbicide during dry season. Yellow star thistle can be treated by a licensed applicator for improved control. Herbicides used within 25 feet of wetland and waters must be approved for use near aquatic habitats. If spraying is utilized, ensure that desired species are not damaged." All undeveloped space down gradient from the residential areas is considered wetland areas according to Sanderson. Therefore, the walking path which is more than 25 feet from the creek, is still considered wetlands and requires an herbicide approved for aquatic habitats be used.
3. Special consideration needs to be taken regarding climatic conditions as well as irrigation schedules for any areas where herbicides are applied and may be moved off site or "runoff" of the target location.

While on location, Sanderson and I witnessed a woman verbally assault an employee working for Martinelli Landscape. The worker was blowing debris off the sidewalk in the residential area. We heard very aggressive language and at a volume that made us think she was yelling at us as we were assessing the retention basin near Cuervo way. She repeatedly screamed profanities and yelled to get out of the area. As we rose back to the street level we saw the woman screaming in the workers face accusing him of killing wildlife and frogs and that he needed to get out of there. (Sentence again was laced with profanities.) We were well away from them but heard and saw the encounter, which went on for at least 5 minutes that we know of. It left both Sanderson and me very shaken and unsettled. Based on the items she yelled at the worker and her voice, I was certain the woman was [REDACTED]. We held back and discussed calling the police to file a report, however she left the area in her vehicle, and we continued monitoring.

August 29, 2019

1100 hrs.

I contacted Martinelli to relay the suggestions Sanderson had provided to me the previous day. I also informed him of the encounter I witnessed between the woman and his employee.

1115 hrs.

I contacted Hobbs to let him know I had relayed suggestions from CDFW to Martinelli. Additionally, I let him know about

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the encounter we had witnessed. Hobbs requested a copy of my investigation once it was complete.

1200 hrs.

I called [REDACTED] and left a message informing her that I met with the Environmental Biologist from Fish and Wildlife. That he had suggestions for the landscaper, but that their current practices were acceptable and there were no violations found. Additionally, I mentioned the wildlife appeared healthy and abundant, that if she had any further information on her claim that wildlife had been killed, she would need to come forward with that.

September 4, 2019

1545 hrs.

I was finally able to speak with [REDACTED] over the phone. [REDACTED] had a lot of issues on her mind, most of which were not relevant or helpful to this case. She knew the frogs had been killed because they had been calling and had been all over the landscape until the roundup applications happened. She was furious that pesticides, or poisons as she prefers to call them, were allowed to be applied. I assured her that Martinelli's employees were trained, that they were properly licensed, and that the applications they had made were allowable. She was not satisfied with my response.

Violations/Possible Violations



A thorough review of the aquatic habitats and pesticides used in the maintenance of Dove Creek Community was completed by two agencies. No violations to pesticide laws or regulations were found.

Enforcement

No further action will be taken by this department.

List of Attachments

- Attachment A- Cal EPA Complaint Report, 2 pages
- Attachment B- Dove Creek Community Map
- Attachment C- Photos of Dove Creek Community, 3 pages
- Attachment D- Cornerstone Plus Label, 19 pages
- Attachment E- Speed Zone Label, 6 pages
- Attachment F- Martinelli October Pesticide Use Report
- Attachment G- Investigation #40-20190830-034
- Attachment H- Wetland Mitigation Monitoring Report, 31 pages
- Attachment I- Photos of Wetland Areas with Frog Populations, 2 pages

REPORT PREPARED BY (NAME/TITLE)  Laura Ramage/Agric. Insp./Biologist III	DATE PREPARED 9/9/2019	REPORT REVIEWED/APPROVED BY (NAME/TITLE) Tom Morgan, Deputy Agricultural Commissioner 	DATE APPROVED 9/9/2019
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Complaint Report

COMP-43570

Complaint Information

Complaint Number	COMP-43570	On-going Occurrence	Yes
Date of Occurrence	06/24/2019 12:00AM	Refinery	Yes
Spill	Yes	Tribal Complaint	No
EJ Complaint	No		

Complainant Information

Anonymous Submission Yes

Complaint Location

Address		City	PASO ROBLES
County		State	California
Zip Code	93446	Longitude	
Latitude			
Location Description			

Alleged Responsible Party

Name	[REDACTED]		
Company	DOVE CREEK HOUSING DEV		
Address	11305 CUERVO WAY & ALL OF DOVE CREEK		
City	ATASCADERO	State	California
Zip Code	93422		
Phone			

Complaint Description

DOVE CREEK HOUSING DEVELOPMENT IS ADJACENT TO WETLAND AND EVEN AFTER I WARNED THEM THEY SPRAYED ROUNDUP AND OTHER PESTICIDES NOT ONLY IN DOVE CREEK BUT THROUGHOUT THE WETLAND KILLING MILLIONS OF FROGS AND OTHER WILDLIFE. DONE POSSIBLE BEFORE AND DONE LASY YEAR AROUND OCT 2018, HUGE FROG KILL OFF AND THEY EVEN SPRAYED IN WETLAND.

Area of Concern

Pesticides

**Nature of Pesticides
Report**

Pesticide Misuse

Reported to CAC

No

Attachment B- Dove Creek Community Map



Dove Creek Community

N ↑

Google

Imagery ©2019 Google, Imagery

Attachment C- Photos of Dove Creek Community (Photos taken by Laura Ramage on 6/25/2019 at Dove Creek Housing Community, Atascadero.)



In the foreground of this photo you can see the landscaped area has been treated with an herbicide. In the middle section of the photo you can see a native species planting with mulch and weed whacking underway. Dove Creek is in the background.

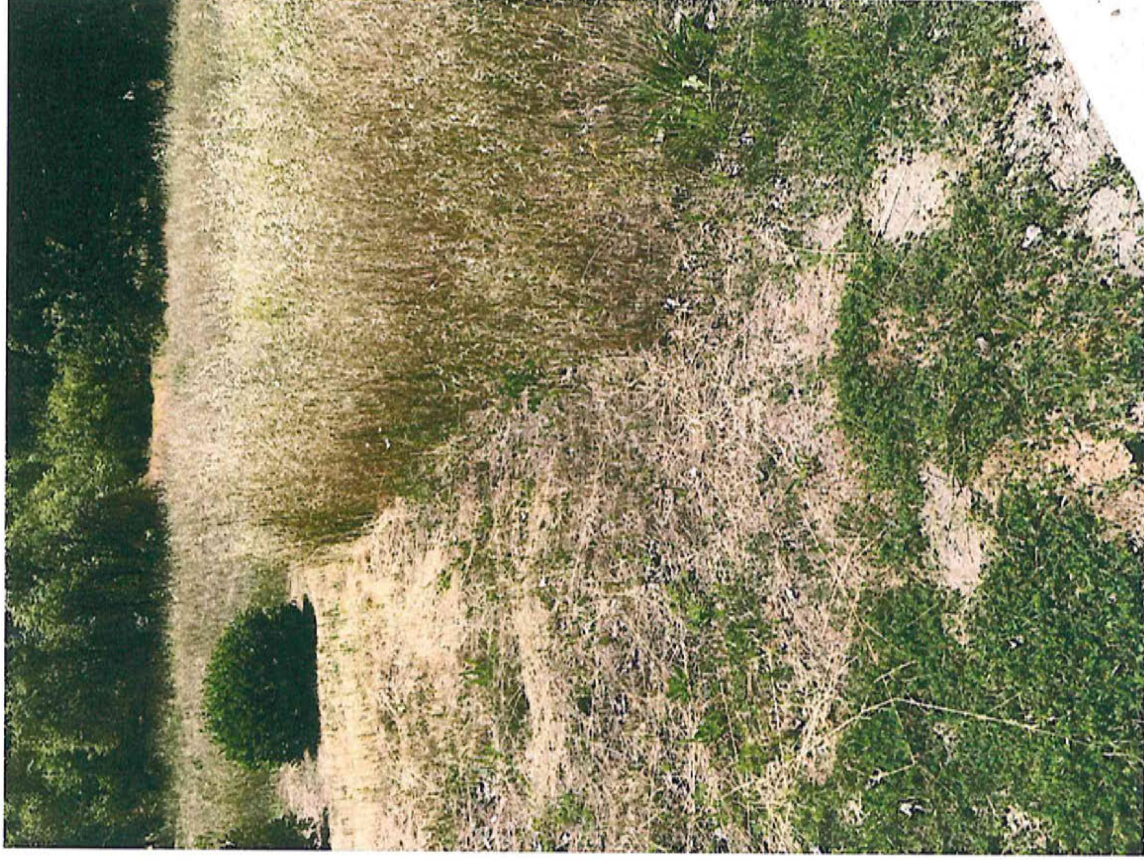


Herbicide treatment in the foreground amongst the landscaping. Middle portion shows a water reclamation basin that is being maintained as green space. Dove Creek is in the background.

Attachment C- Photos of Dove Creek Community (Photos taken by Laura Ramage on 6/25/2019 at Dove Creek Housing Community, Atascadero.)



Areas along the walking trail through the Dove Creek Community are marked with signs regarding sensitive habitat areas. It appears the area is only ever moved or weed whacked.



Area near the walking trail that has been weed whacked.

Attachment C- Photos of Dove Creek Community (Photos taken by Laura Ramage on 6/25/2019 at Dove Creek Housing Community, Atascadero.)



Dove Creek appears to have been dry for some period at this point. There are no signs of dead wildlife. Weeds seem prolific and healthy.



Another view of the dry Dove Creek in a more wooded area. Still no signs of dead wildlife.

Cornerstone[®] Plus

Herbicide

This product contains an ADVANCED fully loaded proprietary surfactant and anti-foaming system for maximum performance and weed control. Avoid herbicide contact with foliage, green stems, exposed non-woody roots or fruit of crops, desirable plants and trees because severe injury or destruction may result.

Group 9 Herbicide

Avoid herbicide contact with foliage, green stems, exposed non-woody roots or fruit of crops, desirable plants and trees because severe injury or destruction may result.

1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Glyphosate (n-(phosphonomethyl) glycine), in the form of its isopropylamine salt 41.0%

OTHER INGREDIENTS: 59.0%

TOTAL 100.0%

*Contains 480 grams per liter or 4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid glyphosate.

2.0 PRECAUTIONARY STATEMENTS

2.1 FIRST AID

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> · Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. · Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. · Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> · Take off contaminated clothing. · Rinse skin immediately with plenty of water for 15 - 20 minutes. · Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> · Move person to fresh air. · If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. · Call a poison control center or doctor for further treatment advice.
If swallowed:	<ul style="list-style-type: none"> · Call a poison control center or doctor immediately for treatment advice. · Have person sip a glass of water if able to swallow. · Do not induce vomiting unless told to do so by a poison control center or doctor. · Do not give anything by mouth to an unconscious person.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	

EPA Reg. No. 74530-43-1381

EPA Est. No. 62171-MS-001

Distributed By:
 Winfield Solutions, LLC
 P.O. Box 64589
 St. Paul, MN 55164-0589

Net Contents: 2.5 Gallons

1/0707/4

WINFIELD

2 .2 IMPORTANT PHONE NUMBER

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

2 .3

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS KEEP OUT OF REACH OF CHILDREN

CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before re-use.

Domestic animals: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- long sleeved shirt and long pants
- shoes plus socks

Follow manufacturer's instructions for cleaning / maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY INSTRUCTIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

2 .4 ENVIRONMENTAL HAZARDS

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

2 .5 PHYSICAL OR CHEMICAL HAZARDS

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas, which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area at the time of application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated area during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical resistant gloves made of any waterproof material
- shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried.

3 .0 STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE

Open dumping is prohibited. Store in original container only. Keep containers closed when not in use. Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, and feed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

CONTAINER HANDLING

Containers that are 270 gallons or smaller are **NONREFILLABLE** containers. Containers that are 275 gallons or larger are **REFILLABLE** containers. Follow the appropriate instructions below:

Nonrefillable Containers: Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Clean container promptly after emptying.

Nonrefillable container equal to or less than 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable Container greater than 5 gallons to 270 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Refillable Container (275 gallons or larger): Refill this container with glyphosate only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

4 .0 PRODUCT INFORMATION

PRODUCT INFORMATION

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.

This product mixes readily with water to be applied as a foliar spray for the control or destruction of most herbaceous plants. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water in accordance with label instructions.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay visible effects of control. Visible

effects are a gradual wilting and yellowing of the plant, which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise specified on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the WEEDS CONTROLLED section of this label.

Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow. For this reason, best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of this product per acre within the specified range when (1) weed growth is heavy or dense, or (2) weeds are growing in an undisturbed (noncultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

Reduced control may result when applications are made to annual and perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the specified stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly specified in this labeling. Mixing this product with herbicides or other materials not specified on this label may result in reduced performance.

In the spring when temperatures may be cooler than usual the application of HELOSATE PLUS ADVANCED to perennial or annual ryegrass, wheat as a cover crop, or volunteer wheat, requires an additional surfactant for maximum control. See the Additives Section of this label for further information.

For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals, or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

4 .¹ Weed Resistance Management

Group 9 Herbicide

Based on the mode of action classification system of the Weed Science Society of America, Glyphosate (active ingredient) is a Group 9 herbicide. Group 9 herbicides may contain plants from any weed population that can be naturally resistant to glyphosate. These weed resistant plants can be effectively controlled using a different Group herbicide or by using other means such as cultural or mechanical practices.

4 .² Weed Resistance Management Directions

Glyphosate resistant biotypes can be minimized by utilizing the following weed resistance management instructions:

1. Begin by preparing your field using tillage or a burndown herbicide application.
2. It is a good practice to scout your fields before and after applications.
3. Use new commercial seeds that have fewer weed seeds.
4. Apply early control of weeds that are relatively small.
5. Cultural practices such as crop rotation or tillage and the addition of other herbicides such as a

- selective and/or a residual herbicide where appropriate are suggested.
6. Rotating to other Roundup Ready crops is one method for adding other herbicides into a continuous Roundup Ready system.
 7. Follow the specified label rate for the most difficult to control weeds. Reject directions that support lower application rates when tank mixing as well as tank mixtures with other herbicides that will reduce product efficacy.
 8. Follow good agricultural practices by cleaning equipment prior to shifting from field to field preventing weed seed or plant root parts from spreading.
 9. Any incidence of repeated non-performance of this product on a particular weed should be reported to any Winfield Solutions, LLC representative, your county extension agent or to the local retailer.

4^{.3} Glyphosate-Resistant Biotypes Management Directions

In order to reduce the spread of confirmed glyphosate resistant biotypes, follow these practices:

1. When a naturally occurring resistant biotype(s) is present, tank mix or apply sequentially with an appropriate herbicide with a different mode of action to achieve control.
2. Use cultural and mechanical control practices, such as crop rotation or tillage, as appropriate.
3. Rotation to other Roundup Ready crops is one method for adding other herbicides into a continuous Roundup Ready system.
4. Control escaping weeds including resistant biotypes before they set seed and scout treat fields after herbicide application.
5. Clean equipment thoroughly prior to exiting fields known to contain resistant biotypes.

To the extent consistent with applicable law, Winfield Solutions, LLC is not responsible for any losses that may result from the failure of this product to control glyphosate-resistant weed biotypes as the occurrence of new glyphosate-resistant weeds cannot be determined until after the product use and scientific confirmation.

5^{.0} MIXING INSTRUCTIONS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.

5^{.1} Mixing, Additives, and Application Instructions

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. DO NOT APPLY WHEN WIND OR OTHER CONDITIONS FAVOR DRIFT. HAND-HELD APPLICATIONS SHOULD BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS.

NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

Eliminate any risk of siphoning the contents of the tank back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by State or local regulations.

Clean sprayer parts immediately after use of this product by thoroughly flushing with water.

5^{.2} Mixing with Water

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the required amount of water. Add the specified amount of this product (see the DIRECTIONS FOR USE and WEEDS CONTROLLED sections of this label) near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

5³ Tank Mixture Instructions

When products in this section are referred to by brand name, the substitution of an approved generic version is acceptable.

TANK MIXTURES

This product does not provide residual weed control. This product may be tank-mixed with other herbicides to provide residual weed control, a broader weed control spectrum or an alternate mode of action. Always read and follow label directions for all products in the tank mixture.

Under certain growth stages and/or under other circumstances, some tank mixtures have the potential to cause crop injury. Prior to use read all labels for products to be used in the tank mixture to determine the potential for crop injury.

To the extent consistent with applicable law buyers and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are specified in this labeling. Tank mixtures with other herbicides, insecticides, fungicides, micronutrients or folia fertilizers may result in reduced weed control or crop injury and are NOT specified for applications of this product unless otherwise noted in this label.

When tank mixing with a generic active ingredient, such as diuron, Atrazine, 2,4-D or dicamba as specified in this label, the user is responsible for ensuring that the specific application being made is included on the label of the product being used in the tank mixture.

Always observe all precautions and limitations on the label, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines of all individual product labels when tank mixing. Use the most restrictive precautionary statements for each product in the tank mixture.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Mixing order is as follows:

1. Water
2. Agitation
3. CORNERSTONE PLUS
4. Tank mix partner
5. Additional adjuvant

Never tank mix without constant and complete agitation.

Mix labeled tank mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Where nonionic surfactant is specified, add this to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. Keep by-pass line on or near bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles. Clean sprayer and parts immediately after using this product by thoroughly flushing with water.

UNDER NO CIRCUMSTANCE DOES WINFIELD SOLUTIONS, LLC SUPPORT A REDUCED RATE APPLICATION FROM SUGGESTED CONCENTRATIONS ON THIS LABEL. THIS INCLUDES INSTANCES WHERE A TANK MIX PARTNER IS USED. FOR ALL ROUNDUP CROP APPLICATIONS, THE STANDARD USE RATE IS 32 OUNCES PER ACRE. DEVIATION FROM THIS RATE WILL REDUCE PERFORMANCE. IF OTHER MANUFACTURERS SUGGEST REDUCING THE RATE TO TANK MIX WITH THEIR PRODUCT OR OTHER PRODUCTS, WINFIELD SOLUTIONS, LLC WILL NOT SUPPORT THE APPLICATION.

5^{.4} Additive Instructions

ADDITIVES

5^{.5} Surfactants:

Nonionic surfactants that are labeled for use with herbicides may be used. Do not reduce rates of this product when adding surfactant. When adding additional surfactant, use 0.5% surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 70% active ingredient or a 1% surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 70% active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

When applied as directed under the conditions described, this product controls annual and perennial weeds listed in this label.

DO NOT add buffering agents or pH adjusting agents to the spray solution when CORNERSTONE PLUS is the only pesticide product used. DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PREHARVEST APPLICATIONS TO COTTON.

5^{.6} Ammonium Sulfate:

The addition of 1 to 2% dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product and this product plus 2,4-D, dicamba or residual herbicide tank mixtures on annual and perennial weeds particularly under hard water conditions, drought conditions or when tank-mixed with certain residual herbicides. The improvement in performance may be apparent where environmental stress is a concern. Low-quality ammonium sulfate may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to addition to the spray tank. If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet line. Ensure the ammonium sulfate is completely dissolved in the spray tank before adding herbicides or surfactant. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

NOTE: The use of ammonium sulfate as an additive does not preclude the need for additional surfactant. Do not use herbicide rates lower than specified in this label. Using lower rates will result in reduced performance.

5^{.7} Colorants or Dyes:

Agriculturally approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's directions.

5^{.8} Drift Control

When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label. The use of a drift reduction additive can affect spray coverage, which can reduce product performance.

6^{.0} SPRAY DRIFT SPRAY DRIFT MANAGEMENT

6.4 For Aerial Application In Arkansas Only

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY CROPS), DESIRABLE PLANTS AND TREES, AS SEVERE INJURY OR DESTRUCTION MAY RESULT.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

See "Product Information" and "Mixing" sections of the container label for this product for essential product performance information.

AERIAL APPLICATIONS

Use the specified rate of this product in 3 to 15 gallons of water per acre.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended.

Apply only when the wind speed is less than or equal to 10 mph at the application site.

Do not apply by air if drift can occur to sensitive nontarget crops or plants that are within 100 feet of the application site.

If wind up to 5 miles per hour is blowing toward desirable vegetation or crops, do not apply within 500 feet upwind of the desirable vegetation or crops.

Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crops will likely require buffer zones in excess of 500 feet.

Use sufficient carrier volume and appropriate equipment set-up to form droplets large enough to avoid drift potential. Coarse droplets in the 300 to 500 (VMD) micron ranges are specified.

Applications should typically be made with the nozzle release point at 8 to 15 feet above the top of the target plants unless a greater height is required for aircraft safety.

The boom length must not exceed 75% of the wingspan or rotor blade diameter. In many cases, reducing this distance to 65% of the length of the wingspan or rotor will improve drift control without affecting the swath width.

Do not make any type of application into temperature inversions. Do not apply into still air where there is a temperature inversion layer low enough for fine spray particles to become suspended and move outside the target area when the inversion layer moves. These conditions may occur when wind speeds are less than 2 mph.

Nozzles must always discharge backward parallel with the air stream and never discharge downwards more than 45 degrees on fixed wing aircraft or forward of the prevailing air flow on rotary winged aircraft. Avoid the use of nozzles with wide-angle discharge.

7.0 APPLICATION EQUIPMENT AND TECHNIQUES

Do not apply this product through any type of irrigation system. This product may be applied with the following application equipment.

Aerial - Fixed wing and helicopter

Broadcast Spray – Ground – Boom or boomless systems, pull-type sprayers, floaters, pick-up sprayers, spray coupes and other broadcast equipment.

Controlled Droplet Applicator (CDA) - Hand-held or boom-mounted applicators that produce a spray consisting of a narrow range of droplet sizes.

Hand-Held and High-Volume Spray Equipment - Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers*, lances and other hand-held and motorized Spray equipment used to direct the spray onto weed foliage.

*THIS PRODUCT IS NOT REGISTERED IN CALIFORNIA OR ARIZONA FOR USE IN MISTBLOWERS

Selective Equipment - Recirculating sprayers, shielded sprayers and wiper applicators.

Injections Systems - Ground or aerial injections systems

See the appropriate part of this section for specific instructions and rates of application.

SPRAY SOLUTIONS SHOULD BE APPLIED IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT THAT IS CAPABLE OF DELIVERING VOLUMES DESIRED.

7 .1 Aerial Applicator Training and Equipment

Aerial application of CORNERSTONE PLUS is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight, and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commission approved fly-ins constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

Application at night - Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

7 .2 Aerial Equipment

Use the specified rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. See the WEEDS CONTROLLED section of this label for specific rates. Unless otherwise specified, do not exceed 1 quart per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced tillage systems, preharvest, silvicultural sites and rights-of-way. Refer to the individual use area sections of this label for specified volumes and application rates.

Do not apply to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

AVOID DRIFT - DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of all desirable vegetation or crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess

of 500 feet.

4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase nozzle pressure.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

Ensure uniform application - to avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE.** The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

7 .3 Ground Broadcast Equipment

For control of annual or perennial weeds listed on this label using broadcast equipment - Use the specified rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified on this label. See the WEEDS CONTROLLED section of this label for specific rates. As density of weeds increases, spray volume should be increased within the specified range to ensure complete coverage. Carefully select proper nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

7 .4 Controlled Droplet Application (CDA)

The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount specified in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 to 15 gallons of water per acre.

For the control of labeled annual weeds with hand-held CDA units, apply a 20% solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 mph (1 quart per acre). For the control of labeled perennial weeds, apply a 20 to 40% solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (2 to 4 quarts per acre).

Controlled droplet application equipment produces a spray pattern that is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

7 .5 Hand-Held and High-Volume Equipment

Use coarse sprays only.

Mix this product in clean water and apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff.

For control of annual weeds listed on this label, apply a 0.5% solution of this product plus nonionic surfactant to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. Allow three or more days before tillage or mowing.

For annual weeds over 6 inches tall, or when not using additional surfactant, or unless otherwise specified, use a 1% solution. For best results, use a 2% solution on harder-to-control perennials, such as Bermuda grass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

When using application methods that result in less than complete coverage, use a 5% solution for annual and perennial weeds and a 5 to 10% solution for woody brush and trees.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

Spray Solution

Desired volume	Amount of CORNERSTONE PLUS					
	½ %	1%	1 1/2%	2%	5%	10%
1 gallon	2/3 oz.	1 1/3 oz.	2 oz.	2 2/3 oz.	6 ½ oz.	13 oz.
25 gallons	1 pt.	1 qt.	1 ½ qt.	2 qt.	5 qt.	10 qt.
100 gallons	2 qt.	1 gal.	1 ½ gal.	2 gal.	5 gal.	10 gal.
2 tablespoons = 1 fluid ounce						

For use in knapsack sprayers, it is suggested that the specified amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

7.6 Selective Equipment

This product may be applied through a recirculating spray system, a shielded applicator, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specifically specified in cropping systems.

A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

A shielded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT WITH DESIRABLE VEGETATION.

Contact of the herbicide solution with the desirable vegetation may result in damage or destruction. Applicators used above desired vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

7.7 Shielded Applicators/Hooded Sprayers

When applied as directed under conditions described for shielded applicators and hooded sprayers, this product will control those weeds listed in the WEEDS CONTROLLED section of this label.

Use the following equation to convert from a broadcast rate per acre to a band rate per acre.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{herbicide broadcast RATE / acre} = \text{herbicide band RATE / acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{herbicide broadcast VOLUME of solution / acre} = \text{band VOLUME of solution / acre}$$

Use nozzles that provide uniform coverage within the treated area. Keep shields on shielded sprayers adjusted to protect desirable vegetation. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT WITH DESIRABLE**

Sicklepod	<i>Cassia obtusifolia</i>
Spanishneedles	<i>Bidens bipinnata</i>
Starbur, bristly	<i>Acanthospermum hispidum</i>
When applied as specified under the conditions described for Wiper Applicators, this product SUPPRESSES the following weeds:	
Annual Broadleaves	
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Dogfennel	<i>Eupatorium capilliflorum</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Ragweed, common	<i>Ambrosia artemisiifolia</i>
Ragweed, giant	<i>Ambrosia trifida</i>
Sunflower	<i>Helianthus annuus</i>
Thistle, musk	<i>Carduus nutans</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Perennial Grasses	
Bermuda grass	<i>Cynodon dactylon</i>
Guineagrass	<i>Panicum maximum</i>
Johnsongrass	<i>Sorghum halepense</i>
Smutgrass	<i>Sporobolus poiretii</i>
Vaseygrass	<i>Paspalum urvillei</i>
Perennial Broadleaves	
Dogbane, hemp	<i>Apocynum cannabinum</i>
Milkweed	<i>Asclepias syriaca</i>
Nightshade, silverleaf	<i>Solanum elaeagnifolium</i>
Thistle, Canada	<i>Cirsium arvense</i>

7^{.9} Injection Systems

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the concentrate of other products for use in injection systems.

8^{.0} WEEDS CONTROLLED

This herbicide controls many annual and perennial grasses and broadleaf weeds.

8^{.1} Annual Weeds

Apply to actively growing grass and broadleaf weeds.

Allow at least 3 days after treatment before tillage.

For maximum agronomic benefit, apply when weeds are 6 inches or less in height.

To prevent seed production, applications should be made prior to seedbed formation.

This product does not provide residual control; therefore, delay application until maximum weed emergence. Repeat treatments may be necessary to control later germinating weeds.

Low-Volume Broadcast Application (Low-Rate Technology)

When applied as directed under the conditions described, this product will control the weeds listed below when:

1. Use water carrier volumes of 3 to 10 gallons per acre for ground applications and 3 to 5 gallons per acre for aerial applications (See the AERIAL EQUIPMENT section of this label for approved sites).
2. A nonionic surfactant is added at 0.5 to 1% by total spray volume. Use 0.5% surfactant concentration when using

surfactants that contain at least 70% active ingredient or a 1% surfactant concentration for those surfactants containing less than 70% active ingredient.

NOTE:

- The addition of 2% dry ammonium sulfate by weight or 17 pounds per 100 gallons of water may increase the performance of this product on annual weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS section of this label.
- Do not tank-mix with soil residual herbicides when using these rates unless otherwise specified.
- For weeds that have been mowed, grazed, or cut, allow regrowth to occur prior to treatment.
- Refer to the Tank Mixtures portion of this section for control of additional broadleaf weeds.

Weed Species		Maximum Height - Length	Rate per Acre* (fl. oz.)
For water volumes, surfactant and/or additives, see above			
Foxtail	<i>Setaria spp.</i>	12"	8 oz.
Barnyardgrass	<i>Echinochloa crus-galli</i>	6" [0 to 4" ¹] [4 to 6" ¹]	12 oz. 16 oz. ¹ 24 oz. ¹
Bluegrass, annual Brome downy** Mustard, blue Mustard, tansy Mustard, tumble Mustard, wild Spurry, umbrella	<i>Poa annua</i> <i>Bromus tectorum</i> <i>Chorispora tenella</i> <i>Descurainia pinnate</i> <i>Sisymbrium altissimum</i> <i>Brassica kaber</i> <i>Holosteum umbellatum</i>	6"	12 oz.
Barley Rye Sandbur, field Shattercane Stinkgrass	<i>Hordeum vulgare</i> <i>Secale cereale</i> <i>Cenchrus spp.</i> <i>Sorghum bicolor</i> <i>Eragrostic cilianensis</i>	12"	12 oz.
Wheat	<i>Triticum aestivum</i>	18"	12 oz.
Morningglory	<i>Ipomoea spp.</i>	2"	16 oz.
Sicklepod	<i>Cassia obtusifolia</i>	2" 2 to 4" 4 to 12"	16 oz. 24 oz. 32 oz.
Bluegrass, bulbous Cheat Chickweed, common Chickweed, mouseear Corn Goatgrass, jointed Groundsel, common Henbit Pennycress, field (fanweed) Rocket, London Ryegrass, common or Italian Shepherd's purse	<i>Poa bulbosa</i> <i>Bromus secalinus</i> <i>Stellaria media</i> <i>Cerastium vulgatum</i> <i>Zea mays</i> <i>Aegilops cylindrica</i> <i>Senecio vulgaris</i> <i>Lamium amplexicaule</i> <i>Thiaspis arvensis</i> <i>Sisymbrium irio</i> <i>Lolium multiflorum</i> <i>Capsella bursa-pastoris</i>	6"	16 oz.

Horseweed / marestalk	<i>Conyza canadensis</i>	6"	16 oz.
Lambsquarters, common	<i>Chenopodium album</i>	6 to 12"	24 oz.
Spurge, annual	<i>Euphorbia spp.</i>		
Buttercup	<i>Ranunculus spp.</i>	12"	16 oz.
Cocklebur	<i>Xanthium strumarium</i>		
Crabgrass	<i>Digitaria spp.</i>		
Dwarf dandelion	<i>Krigia cespitosa</i>		
Falseflax, smallseed	<i>Camelina microcarpa</i>		
Foxtail, Carolina	<i>Alopecurus carolinianus</i>		
Johnsongrass, seedling	<i>Sorghum halepense</i>		
Oats, wild	<i>Avena fatua</i>		
Panicum, fall	<i>Panicum dichotomiflorum</i>		
Panicum, Texas	<i>Panicum texanum</i>		
Pigweed, redroot	<i>Amaranthus retroflexus</i>		
Pigweed, smooth	<i>Amaranthus hybridus</i>		
Witchgrass	<i>Panicum capillare</i>		
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>	4"	24 oz.
Rice, red	<i>Oryza sativa</i>	4"	32 oz.
Teaweed	<i>Sida spinosa</i>		
Sprangletop	<i>Leptochloa spp.</i>	6" 6 to 12"	32 oz. 48 oz.
Geranium, Carolina	<i>Geranium carolinianum</i>	12"	32 oz.
Goosegrass	<i>Eleusine indica</i>		
Primrose, cutleaf evening	<i>Oenothera laciniata</i>		
Pusley, Florida	<i>Richardia scabra</i>		
Spanishneedles	<i>Bidens bipinnata</i>	5 to 12"	32 oz.
Filaree	<i>Erodium spp.</i>	12"	48 oz.

¹ Use these rates to control barnyardgrass in Alabama, Arkansas, Mississippi, Missouri, Louisiana and Texas for preplant treatments.

* For those rates less than 32 fl. oz. per acre, this product at rates up to 32 fl. oz. per acre may be used where heavy weed densities exist.

** For control in no-till systems, use 16 fl. oz. per acre.

Tank Mixtures

CORNERSTONE PLUS plus dicamba plus nonionic surfactant

CORNERSTONE PLUS plus 2,4-D plus nonionic surfactant

DO NOT APPLY DICAMBA OR 2,4-D TANK MIXTURES BY AIR IN CALIFORNIA.

Use these tank mixtures in fallow and reduced tillage areas only. Follow use directions as given in the Low-Volume Broadcast Application section

This product plus dicamba or 2,4-D will control the annual grasses and broadleaf weeds listed for this product alone at the indicated heights (except 8 fl. oz. per acre applications), plus the following broadleaf weeds. For those weeds previously listed at 8 fl. oz. of this product alone per acre, use 12 fl. oz. in these tank mixtures.

NOTE: Refer to the specific product labels for crop rotation restrictions and cautionary statements for all products used in tank mixtures. Some crop injury may occur if dicamba is applied within 45 days of planting. The addition of dicamba in a mixture with this product may provide short-term residual control of selected weed species.

Apply 12 to 16 fl. oz. of this product plus 0.25 pound active ingredient of dicamba or 0.5 pound active ingredient of 2,4-D, plus 0.5 to 1% nonionic surfactant by total spray volume per acre to control dense populations of the following annual broadleaf weeds when less than the height indicated:

Cocklebur (12")	<i>Xanthium strumarium</i>	Morningglory (6")	<i>Ipomoea spp.</i>
Horseweed/marestail (6")	<i>Conyza canadensis</i>	Pigweed, redroot (12")	<i>Amaranthus retroflexus</i>
Kochia* (6")	<i>Kochia scoparia</i>	Pigweed, smooth (12")	<i>Amaranthus hybridus</i>
Lambsquarters (12")	<i>Chenopodium album</i>	Thistle, Russian (12")	<i>Salsola kali</i>
Lettuce, prickly (6")	<i>Lactuca serriola</i>		

* Controlled with dicamba tank mixture only

Apply 16 fl. oz. of this product plus 0.5 pound active ingredient of 2,4-D, plus 0.5 to 1% nonionic surfactant by total spray volume per acre to control the following annual broadleaf weeds when less than 6 inches in height.

Ragweed, common	<i>Ambrosia artemisiifolia</i>	Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Ragweed, giant	<i>Ambrosia trifida</i>	Velvetleaf	<i>Abutilon theophrasti</i>

High-Volume Broadcast Applications

When applied as directed under the conditions described, this product will control the weeds listed below when water carrier volumes are 10 to 40 gallons per acre for ground applications.

Apply 1 to 1.5 quarts of this product per acre plus 0.5 to 1% nonionic surfactant by total spray volume. Use 1 quart per acre if weeds are less than 6 inches tall and 1.5 quarts per acre if weeds are over 6 inches tall. If weeds have been mowed, grazed, or cut, allow adequate time for new growth to reach specified stages prior to treatment. These rates will also provide control of weeds listed in the Low-Volume Broadcast Application section.

Weed Species:

Balsamapple*	<i>Momordica charantia</i>	Panicum	<i>Panicum spp.</i>
Bassia, fivehook	<i>Bassia hyssopifolia</i>	Ragweed, common	<i>Ambrosia artemisiifolia</i>
Brome	<i>Bromus spp.</i>	Ragweed, giant	<i>Ambrosia trifida</i>
Fiddleneck	<i>Amsinckia spp.</i>	Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Fleabane, hairy	<i>Conyza bonariensis</i>	Sowthistle, annual	<i>Sonchus oleraceus</i>
Fleabane	<i>Erigeron spp.</i>	Sunflower	<i>Helianthus annuus</i>
Kochia	<i>Kochia scoparia</i>	Thistle, Russian	<i>Salsola kali</i>
Lettuce, prickly	<i>Lactuca serriola</i>	Velvetleaf	<i>Abutilon theophrasti</i>

* Apply with hand-held equipment only.

8.2 Perennial Weeds

Apply this product as follows to control or destroy most perennial weeds:

NOTE: If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the specified stages.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

The addition of 1 to 2% dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product on perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS section of this label.

When applied as specified under the conditions described, this product WILL CONTROL the following perennial weeds (see additional notes, by weed species, below this listing):

Alfalfa	<i>Medicago sativa</i>	Lantana	<i>Lantana camara</i>
Alligatorweed*	<i>Alternanthera philoxeroides</i>	Lespedeza	<i>Lespedeza spp.</i>
Anise (fennel)	<i>Foeniculum vulgare</i>	Milkweed	<i>Asclepias spp.</i>
Artichoke, Jerusalem	<i>Helianthus tuberosus</i>	Muhly, wirestem	<i>Muhlenbergia frondosa</i>
Bahiagrass	<i>Paspalum notatum</i>	Mullein, common	<i>Verbascum thapsus</i>
Bentgrass	<i>Agrostis spp.</i>	Napiergrass	<i>Pennisetum purpureum</i>
Bermuda grass	<i>Cynodon dactylon</i>	Nightshade, silverleaf	<i>Solanum elaeagnifolium</i>
Bermuda grass, water (Knotgrass)	<i>Paspalum distichum</i>	Nutsedge; purple, yellow	<i>Cyperus rotundus</i>
Bindweed, field	<i>Convolvulus arvensis</i>	Orchardgrass	<i>Cyperus esculentus</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>	Pampasgrass	<i>Dactylis glomerata</i>
Blueweed, Texas	<i>Helianthus ciliaris</i>	Paragrass	<i>Cortaderia spp.</i>
Brackenfern	<i>Pteridium aquilinum</i>	Phragmites*	<i>Brachiaria mutica</i>
Bromegrass, smooth	<i>Bromus inermis</i>	Poison hemlock	<i>Phragmites spp.</i>
Bursage, woollyleaf	<i>Franseria tomentosa</i>	Quackgrass	<i>Conium maculatum</i>
Canarygrass, reed	<i>Phalaris arundinacea</i>	Redvine*	<i>Elytrigia repens</i>
Cattail	<i>Typha spp.</i>	Reed, giant	<i>Brunnichia ovata</i>
Clover, red	<i>Trifolium pratense</i>	Ryegrass, perennial	<i>Arundo donax</i>
Clover, white	<i>Trifolium repens</i>	Smartweed, swamp	<i>Lolium perenne</i>
Cogongrass	<i>Imperata cylindrica</i>	Spurge, leafy*	<i>Polygonum coccineum</i>
Dallisgrass	<i>Paspalum dilatatum</i>	Starthistle, yellow	<i>Euphorbia esula</i>
Dandelion	<i>Taraxacum officinale</i>	Sweet potato, wild*	<i>Centaurea solstitialis</i>
Dock, curly	<i>Rumex crispus</i>	Thistle, Canada	<i>Ipomoea pandurata</i>
Dogbane, hemp	<i>Apocynum cannabinum</i>	Thistle, artichoke	<i>Cirsium arvense</i>
Fescues	<i>Festuca spp.</i>	Timothy	<i>Cynara cardunculus</i>
Fescue, tall	<i>Festuca arundinacea</i>	Torpedograss*	<i>Phleum pratense</i>
Guineagrass	<i>Panicum maximum</i>	Trumpetreeper*	<i>Panicum repens</i>
Horsenettle	<i>Solanum carolinense</i>	Vaseygrass	<i>Campsis radicans</i>
Horseradish	<i>Armoracia rusticana</i>	Velvetgrass	<i>Paspalum urvillei</i>
Ice Plant	<i>Mesembryanthemum crystallinum</i>	Wheatgrass, western	<i>Holcus spp.</i>
Johnsongrass	<i>Sorghum halepense</i>		<i>Agropyron smithii</i>
Kikuyugrass	<i>Pennisetum clandestinum</i>		
Knapweed	<i>Centaurea repens</i>		

* Partial control

THIS PRODUCT IS NOT REGISTERED IN CALIFORNIA FOR USE IN WATER BERMUDA GRASS

See DIRECTIONS FOR USE and MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS sections of this label for labeled uses and specific application instructions.

Alfalfa - Apply 1 quart of this product per acre plus 0.5 to 1% nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Make application after the last hay cutting in the fall. Allow alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Applications should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.

Alligatorweed - Apply 4 quarts of this product per acre or apply a 1.5% solution with hand-held equipment to provide partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain such control.

Anise (fennel) / poison hemlock - Apply a 1 to 2% solution of this product as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth. Repeat applications may be needed in succeeding years to control plants arising from seeds.

Bentgrass - For suppression in grass seed production areas. For ground applications only, apply 1.5 quarts of this product plus 0.5 to 1% nonionic surfactant by total spray volume in 10 to 20 gallons of water per acre. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should be actively growing and have at least 3

19^{.3} VINE CROPS

Kiwi Fruit

Grapes: Any variety of table, wine or raisin grapes may be treated with any equipment listed in this section. Applications should not be made when green shoots, canes, or foliage are in the spray zone.

Allow a minimum of 14 days between last application and harvest.

In the Northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury.

20^{.0} NONCROP USES

See PRODUCT INFORMATION and MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS sections of this label for essential product performance information and the following NONCROP sections for specific uses.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE TURFGRASSES, TREES, SHRUBS OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds. Where repeat applications are necessary, do not exceed 10.6 quarts of this product per acre per year. The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate. This product does not provide residual weed control. For subsequent weed control, follow a label-approved herbicide program.

Read and carefully observe all cautionary statements and all other information appearing on the labels of all herbicides used.

21^{.0} INDUSTRIAL, RECREATIONAL AND PUBLIC AREAS

When applied as directed for NONCROP USES, under conditions described, this product controls annual and perennial weeds listed on this label growing in areas including airports, ditch banks, dry ditches, dry canals, fencerows, golf courses, highways, industrial plant sites, lumberyards, parking areas, parks, petroleum tank farms and pumping installations, pipelines, power and telephone rights-of-way, railroads, roadsides, schools, storage areas, and utility substations

For specific rates of application and instructions for control of various annual and perennial weeds and woody brush and trees, see the WEEDS CONTROLLED section of this label.

This product may be applied with recirculating sprayers, shielded applicators, or wiper applicators in any noncrop site specified on this label. See the SELECTIVE EQUIPMENT part of APPLICATION EQUIPMENT AND TECHNIQUES section of this label for information on proper use and calibration of this equipment.

21^{.1} Tank Mixtures For Industrial Sites And Forestry Site Preparations

CORNERSTONE PLUS plus Oust

Use on industrial sites including airports, industrial plants, lumberyards, petroleum tank farms, pumping stations, pipelines, railroads, roadsides, storage areas or other similar sites where bare ground is desired.

This tank mixture may also be used as a site preparation treatment for sites to be planted to jack pine, loblolly pine, red pine, slash pine and Virginia pine.

When applied as directed for NONCROP USES under the conditions described, this product plus Oust provides control of annual weeds listed in the WEEDS CONTROLLED section of the label for this product and Oust, and control or partial control of the perennial weeds listed below.

Apply 1 to 2 quarts of this product with 2 to 4 ounces of Oust in 10 to 40 gallons of spray solution per acre as a broadcast spray to actively growing weeds.

This mixture may be applied by aerial equipment in site prep operations. When applied by air, use the specified rates in 5 to 15 gallons of spray solution per acre.

THIS PRODUCT PLUS OUST TANK MIXTURES MAY NOT BE APPLIED BY AIR IN CALIFORNIA.

For control of annual weeds, use the lower rates of these products.

**CONDITIONS OF
SALE AND WARRANTY**

**WINFIELD SOLUTIONS, LLC AND SELLER OFFER THIS PRODUCT AND THE
BUYER AND USER ACCEPTS THIS PRODUCT UNDER THE FOLLOWING AGREED
CONDITIONS OF SALE AND WARRANTY.**

The directions for use of this product are believed to be reliable and must be followed carefully. However, it is impossible to take into account all variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions which are beyond the control of WINFIELD SOLUTIONS, LLC or the Seller. WINFIELD SOLUTIONS, LLC warrants only that this product conforms to the chemical description on the label and is believed to be reasonably fit for the purposes referred to in the Directions for Use when used as directed under normal conditions. To the extent consistent with applicable law, WINFIELD SOLUTIONS, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. To the extent consistent with applicable law, in no case shall WINFIELD SOLUTIONS, LLC or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. Any variation or exception from this warranty must be in writing and signed by an authorized WINFIELD SOLUTIONS, LLC representative.

Arsenal is a trademark of BASF Specialty Products

Command is a trademark of FMC Corp.

Def, Sencor are trademarks of Bayer AG

Goal, Garlon, Spike, and Surflan are trademarks of Dow AgroSciences

Thru-Value is a trademark of Waldrum Specialties, Inc.

Microfoil is a trademark of Union Carbide Ag Products

Folex, Prep, and Ronstar are trademarks of Bayer

Bicep, Caliber, Dual, Folex, Fusilade, Prep, Princep, Ronstar and Solicam are trademarks of Syngenta

Permit is a trademark of Gowan.

Harness, Lasso, Lariat, Roundup, Roundup Ultra, and Roundup Ready are trademarks of Monsanto Co.

Banvel, Prowl, Pursuit, Pursuit Plus, Scepter and Squadron are trademarks of BASF Corp.

Canopy, Escort, Gemini, Hyvar, Karmex, Krovar, Lexone, Lorox, Oust, Preview, and Telar are trademarks of E.I.

DuPont de Nemours and Co.

Cornerstone is a registered trademark of Winfield Solutions, LLC.

Attachment E- Speed Zone Label



SpeedZone[®]

SOUTHERN

BROADLEAF HERBICIDE FOR TURF

ACTIVE INGREDIENTS:

2,4-D, 2-ethylhexyl ester	10.49%
Mecoprop-p acid	2.66%
Dicamba acid	0.67%
Carfentrazone-ethyl	0.54%
OTHER INGREDIENTS:	85.64%
TOTAL 100.00%	

THIS PRODUCT CONTAINS:

- 0.52 lb. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 6.96%.
- 0.20 lb. (+)-R-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 2.66%.
- 0.05 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 0.67%.
- 0.04 lb. Ethyl α,2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate or 0.54%.

Contains Petroleum Distillate.
Isomer Specific by AOAC Methods.

KEEP OUT OF REACH OF CHILDREN CAUTION

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)



**READ THE ENTIRE LABEL FIRST.
OBSERVE ALL PRECAUTIONS AND
FOLLOW DIRECTIONS CAREFULLY.**

PRECAUTIONARY STATEMENTS

Hazards to Human and Domestic Animals

CAUTION: Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are barrier laminate, nitrile rubber, neoprene rubber or Viton. If you want more options, follow the instructions for category E on a EPA chemical resistance category selection chart.

All mixers, loaders, applicators, fladders, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical resistant gloves,
- chemical resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

Containers over 1 gallon and less than 5 gallons: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Containers of 5 or more gallons: Do not open-pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If on skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information in case of emergency, call toll free 1-877-800-5556.

NOTE TO PHYSICIAN: Contains petroleum distillate – vomiting may cause aspiration pneumonia.

Environmental Hazards

This pesticide may be toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants,
- Chemical-resistant footwear plus socks,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant headgear for overhead exposure, and
- Protective eyewear.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Reentry Statement: Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

1. PRODUCT DESCRIPTION:

SpeedZone Southern Broadleaf Herbicide for Turf contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production. Without this key enzyme, a build-up of peroxide-like compounds occur, thus causing the plant cell membranes of weeds to rupture.

SpeedZone Southern Broadleaf Herbicide for Turf offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool season turfgrass and most warm season turfgrass.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7 to 14 days.

2. SPRAY PREPARATION:

SpeedZone Southern Broadleaf Herbicide for Turf is an emulsifiable concentrate or an ester formulation intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

Mixing with water:

Add one-half the required amount of water to the spray tank, then add SpeedZone Southern Broadleaf Herbicide for Turf slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture. Storage of the spray mixture beyond 72 hours is not recommended.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

Mixing with liquid fertilizers:

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (e.g. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

Mixing with adjuvants and spray additives:

Adjuvants include surfactants, spreaders, spreader-stickers, spray thickeners, foaming agents, activators, detergents, and drift reducing agents. All additives change the physical and biological properties of the spray solution.

SpeedZone Southern Broadleaf Herbicide for Turf is a solvent based emulsifiable concentrate designed for rapid penetration and uptake. Adjuvant(s) mixed with this product are seldom synergistic, often antagonistic, and may have no significant influence on efficacy.

Certain adjuvants combined with this product can damage the leaf tissue of turfgrass. If any discoloration or cosmetic effects are objectionable or any level of phytotoxicity would be unacceptable, then adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf would not be recommended. Use these adjuvants, spray additives or tank-mix combinations, only when your experience indicates that the tank mixture will not result in objectionable turf injury.

3. GROUND EQUIPMENT:

Spray distribution: The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator. Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications.

Spray volumes of 3 to 220 gallons per acre (except when applying this product to St. Augustinegrass, use spray volumes of 40 to 220 gallons per acre) with spray pressures adjusted to 20 to 40 psi. are appropriate. Use higher spray volumes for dense weed populations.

- Calibration and proper application are essential when using this product.
- Avoid spray overlaps with spray equipment.
- Over-application or rates above those recommended on this labeling can cause turf injury.
- Hand-held technique: Spray wands fitted with flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the flat fan nozzle should be held stationary at the proper height. Side-to-side motion results in uneven coverage. To avoid excessive spray pattern overlaps, a spray colorant may be used.

Hand operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical.

This product may cause injury to susceptible/nontarget plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Applications are recommended only when there is no potential hazard from spray drift during dormant and active growth periods. Do not apply when conditions are conducive to spray drift from the use site to untreated areas.

After using this product, clean sprayer with soap or detergent and water, or an approved spray tank cleaner and rinse thoroughly before applying other pesticides.

4. SPRAY DRIFT MANAGEMENT:

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

Use only medium or coarser spray nozzles according to ASAE (standard 572) definition of standard nozzles or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the turf canopy.

5. WHERE TO USE:

SpeedZone Southern Broadleaf Herbicide for Turf provides selective broadleaf control in warm season and cool season turfgrass in five (5) use sites.

- Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways, aprons, and roughs), and office buildings.
- Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, areas adjacent to athletic fields and paved areas.
- Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- Agricultural site: Commercial sod production
- Non-cropland sites: including farmyards, fencerows or fence lines, highway rights-of-way (principal, interstate, county, private, and unpaved roads); Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians; Industrial sites: Lumberyards, tank farms, fuel or equipment storage areas; Municipal, state, and federal lands: Airports and military installations; railroad rights-of-ways, railroad yards, railroad crossings and railroad bridge abutments; Utility rights-of-way: telephone, pipeline, electrical powerlines, and communication transmission lines.

Prohibitions of Sites:

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

Turfgrass tolerance:

- The turfgrass tolerance to this product may vary and temporary turfgrass yellowing may occur on St. Augustinegrass and certain varieties (F1) hybrids of hybrid bermudagrass. SpeedZone Southern Broadleaf Herbicide for Turf may injure certain turfgrass species. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

Prohibitions:

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not broadcast apply this product when ambient temperatures are above 85°F, some injury may be expected with spot treatments when air temperatures exceed 85°F. For St. Augustinegrass see Table 1 for specific temperature restrictions.

6. APPLICATION SCHEDULES:

Early postemergent applications of SpeedZone Southern Broadleaf Herbicide for Turf are recommended for annual, biennial, and perennial weeds. Apply this product to broadleaf weeds that are young and actively growing for the best results. SpeedZone Southern Broadleaf Herbicide for Turf combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

SpeedZone Southern Broadleaf Herbicide for Turf may be applied as a single broadcast application or as a follow-up broadcast application in the spring, summer, or fall. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective.

Follow-up applications as spot treatments with a minimum 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of SpeedZone Southern Broadleaf Herbicide for Turf. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to SpeedZone Southern Broadleaf Herbicide for Turf.

For newly seeded areas:

The application of SpeedZone Southern Broadleaf Herbicide for Turf to grass seedlings is recommended after the second mowing.

For newly sodded, sprigged, or plugged areas:

The application of SpeedZone Southern Broadleaf Herbicide for Turf to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

For dormant turf:

Applications to dormant bermudagrass, dormant zoysiagrass, and dormant bahiagrass are suggested.

7. CULTURAL TIPS FOR IMPROVED CONTROL:

Irrigation:

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Rainfast in 3 hours. Do not irrigate or water the turfgrass within 3 hours after application. If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.

Mowing:

Delay mowing 2 days before and until 2 days after the application of this product.

Reseeding interval:

Treated areas may be reseeded 1 week after application.

8. HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES:

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Do not apply more than 2 broadcast treatments per season. A minimum of 30 days is required between applications.
 Use rates and spray volumes of SpeedZone Southern Broadleaf Herbicide for Turf as broadcast treatments for use on turfgrass are presented in Table 1.

TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl. oz./1,000 sq. ft.	Spray Volume Gallons per 1,000 sq. ft.
Warm Season Turf				
Hybrid bermudagrass, Bahiagrass, Zoysiagrass, Buffalograss, Centipedegrass, Seashore paspalum and Kikuyugrass	2 to 4	3 to 220	0.75 to 1.5	0.1 to 5.0
Common bermudagrass	3 to 5	3 to 220	1.1 to 1.8	0.1 to 5.0
NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.				

TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl. oz./1,000 sq. ft.	Spray Volume Gallons per 1,000 sq. ft.
Warm Season Turf				
Common St. Augustinegrass (Excluding 'Floritam' and 'Bitterblue' varieties) See Instructions Below:	1.5 to 4 During higher temperatures, lower rates within this range are recommended.	40 to 220	0.55 to 1.5 During higher temperatures, lower rates within this range are recommended.	1.0 to 5.0
<ul style="list-style-type: none"> Do not apply this product to 'Floritam', 'Bitterblue' and other improved varieties of St. Augustinegrass. Do not broadcast or spot apply this product to St. Augustinegrass during spring green-up, which is the transition period between dormancy and active growth. Do not broadcast or spot apply this product to St. Augustinegrass during the fall to winter transition or if temperatures are expected to drop below 40°F within ten (10) days of application If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended. Avoid mowing 2 days before and until 2 days after the application of this product. Over application of this product can cause turf injury (discoloration, turf thinning, stunting and even turf death). Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F; some injury may be expected with spot treatments when air temperatures exceed 85°F. Do not use tank mixture combinations, unless your experience indicates that the tank mixture will not result in turf injury. To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of PBI/Gordon Corporation and all risk is assumed by the buyer and/or user. <p>NOTE: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.</p>				

TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.

Species	Amount of Product Pints/Acre	Recommended Spray Volume Gallons/Acre	Amount of Product fl. oz./1,000 sq. ft.	Spray Volume Gallons per 1,000 sq. ft.
Cool Season Turf				
Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall fescue, Red or fine leaf fescues, Creeping bentgrass, Colonial bentgrass. Mixtures of cool season species established for aesthetic purposes. Mixtures of cool season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass & orchardgrass).	4 to 6	3 to 220	1.5 to 2.2	0.1 to 5.0
Note: If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with SpeedZone Southern Broadleaf Herbicide for Turf are not recommended.				

Limitations on 2,4-D applications to ornamental turfgrass and sod farms

Use Site	Maximum Rate per Application	Maximum Number of Applications per Year	Minimum Interval Between Applications	Minimum Spray Volume	Maximum Seasonal Rate
Ornamental turfgrass	6.0 pints/A (0.4 lb. 2,4-D ae/A)	2	30 days	2 gal./A	12 pints/A (0.8 lb. 2,4-D ae/A)
Sod farms	6.0 pints/A (0.4 lb 2,4-D ae/A)	2	21 days	2 gal./A	12 pints/A (0.8 lb. 2,4-D ae/A)
ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 12 pints (0.8 lb 2,4-D ae) per acre per season, excluding spot treatments.					

SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):

- Calibration and proper application are essential when using this product.
- Over application or rates above those recommended on this labeling including excessive overlaps of this product can cause turf injury.
- Uniform applications are essential when using this product.
- Hand-held techniques: Spray wands fitted with flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the flat fan nozzle should be held stationary at the proper height. Side-to-side motions result in uneven coverage. To avoid excessive spray pattern overlaps, a spray colorant may be used.
- For cool season turfgrass, mix 1.5 to 2.2 fl. oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible.
- For warm season turfgrass other than St. Augustinegrass, mix 0.75 to 1.5 fl. oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. For St. Augustinegrass, higher spray volumes (more than 2 gallons/1,000 square feet) are recommended.
- Apply any time the emerged broadleaf weeds are susceptible.
- Do not apply more than 2 spot treatments per season. A minimum of 30 days is required between applications.
- Do not use tank mixture combinations, unless your experience indicates that the tank mixture is effective and will not result in turf injury. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

9. BROADLEAF WEEDS CONTROLLED:

This product will control or suppress the following broadleaf weeds. Apply any time the emerged broadleaf weeds are susceptible.

BROADLEAF WEEDS

Aster, white heath & white prairie	Groundsel
Bedstraw	Hawkweed
Beggarweed, creeping	Healall
Bindweed	Henbit
Black medic	Innocence (Blue-eyed Mary)
Broadleaf plantain	Knotweed
Buckhorn plantain	Lambsquarters
Bull thistle	Lawn burweed
Burclover	Lespedeza, common
Burdock, common	Mallow, common
Buttercup, creeping	Matchweed
Carpetweed	Mouseear chickweed
Chickweed, common	Old world diamond flower
Chicory	Oxalis (*yellow woodsorrel & creeping woodsorrel)
Cinquefoil	Parsley-piert
Clover	Pennsylvania smartweed
Compassplant	Pepperweed
Curly dock	Pigweed
Dandelion	Pineappleweed
Dayflower	Plantain
Deadnettle	Poison ivy
Dock	Poison oak
Dogfennel	Puncturevine
Dollarweed (*pennywort)	Purple cudweed
English daisy	Purslane
False dandelion	Ragweed
(*spotted catsear & common catsear)	Redweed
Field bindweed	Red sorrel (*sheep sorrel)
(*morningglory & creeping jenny)	Shepherd's purse
Field oxeye-daisy (*creeping oxeye)	Spurge
Filaree, whitestem & redstem	Thistle
Florida betony	Veronica (*corn speedwell)
Florida pusley	Virginia buttonweed
Ground ivy	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
	Wild carrot

(cont. on next column)

BROADLEAF WEEDS (cont.)

Wild garlic	Wild strawberry
Wild geranium	Wild violet
Wild lettuce	Yarrow
Wild mustard	Yellow rocket
Wild onion	
*Synonyms	

POSTEMERGENCE CONTROL OF GRASSY WEEDS:

This product will control or suppress specific annual grasses when applied at a rate of 4-5 pints/acre. Depending on timing of application, a second application may be needed for adequate control. If necessary, a second application may be made at the same rate, 30 days after the initial application. This product works best when applied while the annual grasses are small (pre-tiller) and actively growing, but control can be obtained at all growth stages. Some biotypes may show resistance to PPO inhibiting herbicides.

Common Name	Scientific Name
Goosegrass*	Eleusine indica

*Not for use in California

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

For nonrefillable containers less than 5 gallons:

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For nonrefillable containers greater than 5 gallons:

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

(cont. on next page)

STORAGE AND DISPOSAL (cont.)

For Refillable Containers:

CONTAINER HANDLING: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Container cleaning: Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in *Washington Toxics Coalition, et al. v. EPA*, C01-0132C, (W.D. WA). For further information, please refer to EPA Web Site: <http://www.epa.gov/espp>.

LIMITED WARRANTY AND DISCLAIMER

FOR USE ONLY AS DIRECTED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. If these terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full. The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere.

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EPA REG. NO. 2217-835



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MANUFACTURED BY
PBI/GORDON CORPORATION
1217 WEST 12TH STREET
KANSAS CITY, MISSOURI 64101
www.GordonsProfessional.com

ATTENTION: This specimen label is provided for informational use only. This product may not yet be available for sale in your state or area. The information found in this label may differ from the information found on the product label you are using. Always follow the instructions for use and precautions on the label of the product you are using.

Attachment F- Martinelli October Pesticide Use Report

MSPUR Non-Ag, Non-Prod Ag Monthly Report

Report Status: Accepted by DPR

11/13/2018 9:28 AM

Submittal Status: Submitted to DPR

Document #				
Operator Name MARTINELLI LANDSCAPE CONSTRUCTION, INC		Address P.O. BOX 1256, TEMPLETON, 93465		Phone (805)434-0503
License # 36206	Permit # N/A	County 40 San Luis Obispo	Report Month/Year 10/2018	Total Applications 17

Line	EPA / Calif. Reg. No. From Label	Product Name	No. of Appl.	Total Used / Units	Commodity Treated	Area/Units Treated
1	74530-43-AA-1381	CORNERSTONE PLUS	13	94 OZ	30 LANDSCAPE MAIN	
2	2217-835-ZA	SPEED ZONE SOUTHERN BROADLEAF HERBICIDE FOR TURF	4	58 OZ	30 LANDSCAPE MAIN	

PESTICIDE EPISODE INVESTIGATION REPORT

PR-ENF-127 (REV. 8/07)

Page 1 of 1

RECEIVED BY Morgan, Tom	RECEIVED FROM Cal EPA	REPRESENTING Cal EPA	DATE/TIME RECEIVED 6/25/19 8:00	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	PERSON NOTIFIED DFA _____	DATE _____
TYPE OF EPISODE <input type="checkbox"/> HUMAN EFFECTS # _____ <input type="checkbox"/> PROPERTY LOSS \$ _____		<input checked="" type="checkbox"/> ENVIRONMENTAL EFFECTS <input type="checkbox"/> OTHER		PRIORITY INVESTIGATION <input type="checkbox"/> YES # _____ <input checked="" type="checkbox"/> NO		
OTHER I.D. NO. COMP-43570	COUNTY OF OCCURRENCE San Luis Obispo	DATE OF OCCURRENCE MO 10 DAY 01 YR 18	TIME 00:00	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	DFG _____	_____
EPISODE LOCATION Dove Creek Housing Development Atascadero, CA					DHS _____	_____
					DIR _____	_____
					EPA _____	_____
					CAC _____	_____
					OTHER _____	_____

INJURED/COMPLAINANT INFORMATION

COMPLAINT SIGNED <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	DR. VISITED <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	EXTENT OF INJURY/ILLNESS <input type="checkbox"/> Fatal <input type="checkbox"/> Symptoms <input type="checkbox"/> Serious <input type="checkbox"/> Exposed Only	ACTIVITY OF PERSON EXPOSED/INVOLVED <input type="checkbox"/> Mixer/Loader <input type="checkbox"/> Field worker* <input type="checkbox"/> Applicator <input type="checkbox"/> Public* <input type="checkbox"/> Other* Explain _____	
NAME	AGE	SEX	WHS NO.	WORKDAYS LOST
ADDRESS	CITY	ZIP	PHONE	
MEDICAL FACILITY NAME	<input type="checkbox"/> TREATMENT PROVIDED <input type="checkbox"/> OBSERVATION ONLY	HOSPITALIZED <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE/TIME ADMITTED	DATE/TIME DISCHARGED
PHYSICIAN	ADDRESS	PHONE		
SIGNS/SYMPTOMS EXPERIENCED				
EMPLOYER	ADDRESS	PHONE		

PROTECTIVE MEASURES USED

<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Cloth/Leather Gloves	<input type="checkbox"/> Dust Mask	<input type="checkbox"/> Work Clothes	<input type="checkbox"/> Closed System
<input type="checkbox"/> Goggles	<input type="checkbox"/> Chem. Resistant Gloves	<input type="checkbox"/> 1/2 Face Respirator	<input type="checkbox"/> Coveralls	<input type="checkbox"/> Enclosed Cab
<input type="checkbox"/> Faceshield	<input type="checkbox"/> Other _____	<input type="checkbox"/> Full Face Respirator	<input type="checkbox"/> Chem. Resistant Clothes	<input type="checkbox"/> Enc. Cab w/Air Purification
<input type="checkbox"/> Eye/Sun Glasses	<input type="checkbox"/> None	<input type="checkbox"/> SCBA	<input type="checkbox"/> Chem. Resistant Boots	<input type="checkbox"/> Other _____
<input type="checkbox"/> None		<input type="checkbox"/> None	<input type="checkbox"/> Head Covering	<input type="checkbox"/> None
			<input type="checkbox"/> Other _____	

ENVIRONMENTAL OR PROPERTY DAMAGE

DESCRIPTION OF DAMAGE Sprayed herbicide throughout wetland killing millions of frogs & other wildlife.	AMOUNT/VALUE NA	
OWNER Dove Creek Housing Development	ADDRESS 11305 Cuervo Way, Atascadero, CA	PHONE 805-602-9088
ALLEGED RESPONDENT(S) NAME Martinelli Landscape Construction	PHONE 805-434-0503	LICENSE/PERMIT NO. 36206
RECOMMENDATION MADE <input type="checkbox"/> YES # _____ <input checked="" type="checkbox"/> NO		
ADDRESS P.O. Box 1256	EMPLOYER'S NAME Martinelli	PHONE 805-434-0503
CITY Templeton	STATE CA	ZIP 93465
EMPLOYER'S ADDRESS same		
EXPLAIN Licensed and Registered Maintenance Gardener	CITY	STATE
		ZIP

PESTICIDE NAME/MANUFACTURER	EPA REGISTRATION NUMBER	CATEGORY	DOSE/DILUTION/VOLUME	TREATMENT DATE	COMMODITY/SITE TREATED
Speed Zone/Gordon's Pro	2217-835-ZA	Caution	14.5 oz/appl	October	Landscape
Cornerstone Plus/Winfield	74530-43-AA-1381	Caution	7.25 oz/appl	October	Landscape

EQUIPMENT TYPE/MAKE/MODEL/DESCRIPTION
Backpack sprayer, 5 gallon.

SUMMARIZE THE EPISODE INCLUDING A DETAILED DESCRIPTION OF EVIDENCE TAKEN (Use Episode Report Supplement Form PR-ENF-127A if Additional Space Is Needed)

On June 25, 2019, the San Luis Obispo County Agriculture Commissioner's Office received a Complaint Report from Cal EPA which claimed that the Dove Creek Housing Development sprayed rounup and other pesticides throughout the wetland areas killing millions of frogs and other wildlife. Complaint stated the spraying was done last year in October of 2018. (The complainant and another resident came forward to the SLO County Ag. Commissioner's Office directly, therefore this case was closed and a new investigation was opened. Refer to #INV-40-20190830-035 for the narrative.)

REPORT PREPARED BY (NAME/TITLE) Laura Ramage/Ag Insp. Bio. III	DATE PREPARED 10-3-19	REPORT REVIEWED/APPROVED BY (NAME/TITLE) Tom Morgan/Deputy Ag. Comm.	DATE APPROVED
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Print Form

Mitigation Monitoring Report: Year 5

for the

The Villages at Dove Creek USACE File #28513S

City of Atascadero
San Luis Obispo County, California



Prepared for

Dove Creek HOA
C/o Goetz Manderley
935 Riverside Ave. Ste. 13
Paso Robles, CA 93446

By

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626

December 2015

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Cover photo: Wetland brambleberry hedge, July 28, 2014.

1.0 Project Summary

The Villages at Dove Creek is a residential and commercial development on 64 acres in the City of Atascadero (Figure 1). Two seasonal creeks, Paloma Creek and North Fork Paloma Creek, flow through the property, with 1.63 acres of seasonal wetland adjacent to the North Fork. The creeks and wetland are within the jurisdiction of the U.S. Army Corps of Engineers (Corps) under Clean Water Act section 404. The project involved expansion of El Camino Real, which crosses both creeks. Two box culverts along the jurisdictional streams were expanded. The expansion resulted in the permanent loss of 110 linear feet of section 404 waters. At the crossing of North Fork Paloma Creek approximately 100 square feet of seasonal wetland were permanently filled. Construction activities requiring work in the wetland were completed in accordance with the Nationwide Permit authorization in 2005. Mitigation installation was finished in 2008. Due to starts, stops, re-starts, and re-planting, this is the “fifth year” monitoring report, following seven-plus years of effort. Initial implementation of the wetland buffer planting in 2006 was not successful, and was not deemed complete until 2008. Portions of the riparian buffer “brambleberry hedge” was replaced in 2013 and 2014. This final report summarizes mitigation performance from 2008 to 2015 (Year 5 equivalent).

TABLE 1. PROJECT INFORMATION.

Project Name	The Villages at Dove Creek
Applicant Representatives to HOA responsible for maintaining mitigation areas	[REDACTED] 35 Riverside Ave., [REDACTED] Paso Robles, CA 93446 (805) 239-7889
Permittee	Corona Dove Creek LLC c/o Brooks Street 1300 Quail Street, Suite 100 Newport Beach, CA 92660 Contact: [REDACTED] (909) 833-0222 Managed by: Robbins Reed, Inc. 1308 Monterey St. STE 210 San Luis Obispo, CA 93401-0801 Contact: [REDACTED] [REDACTED]@robbinsreed.com
Consultant	Althouse and Meade, Inc. 1602 Spring Street Paso Robles, CA 93446 (805) 237-9626 Contact: [REDACTED]; Monitor: [REDACTED]
USACE permit file number	28513S_2005

RWQCB	[No numbers were assigned to Water Quality Certifications in 2005. Amanda Schmidt wrote the certification, and we submitted reports to Dominic Roques.]
Area of impact and type(s) of habitat impacted	110 linear feet of section 404 waters of U.S. 100 square feet of section 404 wetlands
Date project construction commenced	September 30, 2005
Date project construction finalized	November 30, 2005
Date initial mitigation installation work was completed	Started - October 9, 2006 Finished - December 15, 2008 Irrigation was turned off in 2009 due to recession. Re-planting occurred in 2013 and 2014.
Indication of project timeline (i.e., first monitoring year, etc.)	Fourth year of mitigation monitoring (report for December 2012 to December 2013). Fifth year of mitigation monitoring (report for December 2013 to December 2014).
Amount and information on any required performance bond or surety, if any	City holds a landscape bond, expected to be released in the first quarter of 2016.
Date(s) of mitigation monitoring visits	May 7, June 2, July 18, and August 5, 2014. February 3, April 14, September 17, and December 22, 2015.

2.0 Permit Conditions 28513S_2005

A copy of the USACE 2005 Nationwide Permit authorization is provided in Appendix C. Special conditions and compliance results for the NWP are summarized in Table 2 below.

TABLE 2. SPECIAL CONDITIONS FROM NWP AND COMPLIANCE RESULTS.

Condition	Results
1) Expand existing wetland by 100 square feet (0.002 acre).	Exceeded condition by 0.14 acre. Created 0.15 acre of wetland by expanding an existing wetland and creating a new 0.04 acre wetland.
2) Extend culvert when the project is dry.	Culverts were installed between September and November 2005, when the streams were dry.
3) Conduct pre-construction surveys for California red-legged frogs, provide contractor training, and oversee earthmoving activities during construction of the culverts and wetland expansion.	Surveys were conducted, contractor training was provided for all earthmoving contractors, including culvert extensions and wetland expansion.
4) Relocation of California red-legged frogs not authorized.	California red-legged frogs have not been detected at Dove Creek during 2005 to 2015.

Condition	Results
5) Permanent fencing to provide an average riparian buffer of 35 feet.	Residential walls were constructed above the wetland mitigation area to the west and north, adjacent to homes. A split-rail fence was installed more than 35 feet from the created wetland to the east and south, separating the riparian buffer and wetland from a pedestrian path.
6) Erosion control/SWPPP implementation	All exposed slopes over 3:1 were protected with biodegradable erosion control fabric, vegetated, and protected from erosion. The wetland creation area was protected by silt fence during and shortly after construction. Adjacent areas were vegetated.
7) Wetland will be identified during construction.	Wetlands were identified with Sensitive Habitat signs, surrounded with chain link fence during initial project grading, prior to wetland creation.
8) Annual monitoring reports for 5 years.	After construction was completed, and the mitigation area planted, maintenance was stopped due to economic recession. The Year 1 monitoring report was submitted for 2009, after initial mitigation installation in 2008, followed by Years 2 and 3 in 2010 and 2011. The Year 4 monitoring report was completed in 2013 during a drought period, and the buffer replanted in 2014 to meet the City's Open Space Management Plan performance standards for the riparian buffer. This report constitutes the Year 5 report, 10 years after initial mitigation installation.
9) Final Wetland Mitigation and Monitoring Plan	Final WMMP approved in 2006.

3.0 Approved Success Criteria – Wetland Mitigation and Adjacent Riparian Buffer

Original text from mitigation plan: *The site will be monitored during the fall and mid-winter for five years. If the project does not meet success criteria by year five, remediation will be continued and the project monitored until success is met.*

TABLE 3. SUCCESS CRITERIA AND MONITORING METHODS. Vegetative cover, hydric soils, and wetland plant species were part of the approved Mitigation and Monitoring Plan (Althouse and Meade, Inc. 2006). Willows and riparian buffer were part of the Open Space Management Plan, a City of Atascadero – approved document.

Feature	Performance Criteria	Year 1	Year 2	Year 3	Year 4	Year 5
Hydroseed	Vegetative cover	>80%	>90%	>95%	>95%	>95%
Wetland basin	Hydric soils	Saturated for several weeks	Saturated for several weeks	Redoximorphic features	Redoximorphic features	Redoximorphic features
Wetland basin	% cover of wetland species	>50%	>50%	>50%	>55%	>50%
Wetland basin	% cover native species	>50%	>50%	>50%	>50%	>50%
Wetland basin	% vegetative cover	>80%	>80%	>80%	>80%	>80%
Willows	% survival (of 48 planted)	>80%	>75%	>75%	>79%	>70%
Riparian buffer	% survival (of 104 shrubs planted)	>80%	>80%	>75%	>79%	>75%

Redoximorphic features and hydrophytic vegetation met performance criteria in 2013. Willows and riparian buffer were replanted in 2014. Hydric soils in the southern created wetland was confirmed in 2015.

4.0 Compensatory Mitigation Site Information

- Mitigation for the project was performed on-site.
- Mitigation proposed to add 330 linear feet of wetland, about 15 feet wide, to an on-site wetland, or 0.11 acres (4,950 square feet) of additional wetland habitat.
- The site elevation was lowered by minimal grading to allow water to spread and saturate the soil.
- Sedges and rushes were collected from the site and planted in the new wetland adjacent to existing tules.
- An additional 0.08 acres (3500 square feet) of riparian habitat was proposed.
- The riparian buffer was proposed to be a brambleberry hedge planted with:
 - 52 native California wild roses (*Rosa californica*) - local container stock
 - 52 California blackberries (*Rubus ursinus*) - local container stock
 - 36 willows - collected from the site and installed as live stakes.
- Wetland mitigation plantings in the brambleberry hedge (riparian buffer) failed due to lack of irrigation.

- Brambleberry hedge replanting was conducted in winter 2011 and failed again, due to lack of irrigation and maintenance.
- Replanting of the brambleberry hedge occurred in July 2014, and is successful.
- Success criteria and monitoring methods for assessing the progress of the mitigation are provided in Appendix A. Photos are in Appendix B. Complete data are provided in Appendix C.

5.0 Status of Mitigation Activities

Progress of restoration and enhancement activities were documented by monitors during site visits conducted May, June, July and August of 2014. February, April, September and December 2015. Plant survival and establishment was assessed to determine average cover and success, and make recommendations for replacement plants. Wetland mitigation efforts have been successful in creating additional wetlands that support wetland plant species. Additional trees and shrubs were planted in July 2014 and plants are doing well. They were mulched and are being irrigated regularly. See table 3.

Fencing requirements were met in the 2011 report and are not addressed again in this report.

The following summary lists monitoring observations for each mitigation item.

5.1 Vegetative Cover—Total and Native Species Cover

Approximately 0.11 acre of wetland habitat was created at the border of existing wetland. Adjacent to wetland, approximately 0.08 acre of riparian buffer was created. The site was planted from divisions of on-site material, container stock, and live stakes.

TABLE 4. VEGETATIVE COVER.

Estimated Percent Cover (total), by Location	Wetland: 96% (absolute cover, all species) Riparian Buffer: 80% (absolute cover)
Estimated Percent Cover (native)	Wetland: 49% absolute cover of native species (51 percent relative cover) Riparian Buffer: 15% of total cover consists of native species (most of the vegetative cover consists of weeds)
Year 4 Target:	Total cover: >80% Native Cover: >50%
Year 4 Target Met?	Wetland: Total cover and percent native cover targets met Riparian buffer: Percent native cover targets not met
Comments	The upland riparian buffer is not completely vegetated. During the week of July 21, 2014, additional plants were installed: 12 one-gallon toyon, 2 five-gallon valley oaks, 13 one-gallon elderberries, and an additional 22 wild roses.
Photos	Photos 3, 4, 5, 6 and 7 in Appendix B

TABLE 5. WILLOW LIVE STAKES.

Quantity Surviving	<p>Since the federal wetland has recovered nicely with dense cattails and rushes, we do not recommend remediation to include more willows at that site. Forty-eight willow stakes were planted in an adjacent area approximately 43' by 40', where landscape irrigation runoff has created a wetland thick with cattails (see map in Figure 2 and Photos 9 and 10. Twenty willow stakes have survived. Several pairs of red-winged blackbirds nested in the cattails during 2015.</p> <p>Percent survival: 42%</p>
Year 5 Target Met?	Yes. There is adequate riparian vegetation.

Wetland Species Present

One goal of the mitigation project is to create new wetland which requires dominant vegetation to be hydrophytic species. Propagules of spikerush (*Eleocharis*) and flatstem rush (*Juncus phaeocephalus*) were collected and used to plant the mitigation area. Vegetation was sampled using ten 1-meter quadrat samples and results were averaged. Percent cover by wetland species was observed. The top ten species in terms of percent cover are presented here; complete sampling data is presented as Appendix C. Indicator status is indicated as an abbreviation:

- OBL is an obligate wetland plant.
- FACW is a facultative wetland plant that can live in saturated or unsaturated environments, but tends to occur more frequently in wetland habitats.
- FAC is a facultative indicator plant that grows in both wetland and upland habitats.
- FACU is a plant that can live in saturated or unsaturated environments, but tends to occur most often in upland habitats.
- UPL is an upland (not wetland) plant.
- NI means not an indicator listed in reference tables. These species are treated as UPL for calculations as instructed in the 2008 Arid West Supplement.

TABLE 6. WETLAND SPECIES PRESENT. Species are presented with Jepson Manual 2nd Edition Names and National Wetland Plant List Names (current edition, approved 2012) where names are different. Average absolute percent cover is across all quadrats sampled.

Jepson 2 nd Edition Species Name	NWPL Species Name	Average Absolute % Cover	Dominant Species?	Origin	Indicator Status
<i>Juncus phaeocephalus</i>	(same)	16.7	Yes	Native	FACW
<i>Bromus hordeaceus</i>	(same)	16.4	Yes	Introduced	FACU
<i>Schoenoplectus californicus</i>	(same)	14.4	Yes	Native	OBL
<i>Geranium molle</i>	(same)	10.1	Yes	Introduced	NI
<i>Eleocharis macrostachya</i>	<i>Eleocharis palustris</i>	8.1		Native	OBL
<i>Phalaris aquatica</i>	(same)	7.0		Introduced	FACU
<i>Rumex crispus</i>	<i>Rumex crispus</i>	5.9		Introduced	FAC
<i>Elymus triticoides</i>	<i>Leymus triticoides</i>	3.2		Native	FAC
<i>Festuca perennis</i>	<i>Lolium perenne</i>	2.5		Introduced	FAC
<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	<i>Heliotropium curassavicum</i>	2.4		Native	FACU

TABLE 7. WETLAND QUADRAT SAMPLES. For combined quadrat samples the site meets wetland vegetation criteria:

Dominance Test Score	50% (two species of four dominant species are FAC or better)
Prevalence Index Score	2.96 (≤ 3 indicates wetland vegetation)
Average Cover of Wetland Species	53.1% Absolute Cover 55% Relative Cover of wetland species
Year 4 Target	More than 50% cover is wetland species
Year 4 Target Met?	Yes
Comments	Percent cover by wetland species is 53% absolute cover over combined quadrats, or 55% of vegetation onsite. However, only five of the ten quadrat samples meet wetland criteria for hydrophytic vegetation.
Photos	Photo 11

Half of quadrats met wetland vegetation criteria via Prevalence Index or Dominance Test. The other five quadrats did not have sufficient cover of facultative or better species even though these species were present in low abundance in all quadrats.

Brambleberry Hedge

The upland boundary of the mitigation site has been planted with a “brambleberry hedge” created by wild roses, blackberries, box elder, California sycamore, valley oak, elderberry and toyon. This hedge provides a buffer between the compensatory mitigation site and public use areas and has been mulched, irrigated and weeded as part of the open space management plan.

TABLE 8. BRAMBLEBERRY HEDGE PLANT SURVIVAL. Material planted in July 2014 are included in the Live Plant column. Photos 3, 4, 5 and 6.

Common Name <i>Scientific name</i>	Quantity Originally Planted or Re-planted	Live Plants July 2014	Percent Survival
California wild rose <i>Rosa californica</i>	52	66	127
California blackberry <i>Rubus ursinus</i>	52	4	8
Box elder <i>Acer negundo</i>	15	6	40
Toyon <i>Heteromeles arbutifolia</i>	22	22	100
Sycamore <i>Platanus racemosa</i>	5	5	100
Valley oak <i>Quercus lobata</i>	15	15	100
Blue elderberry <i>Sambucus mexicana</i>	34	35	88
Totals	243	191	79

Hydric Soils

One goal of the mitigation project is to create new wetland which requires development of hydric soils in the wetland area. For Year Four the target is to see development of soil redoximorphic features.

TABLE 9. HYDRIC SOILS.

Redoximorphic Features Present? (date)	<p>Present in low abundance.</p> <p>A formal test pit was described in the mitigation area.</p> <ul style="list-style-type: none"> o Redox was observed at 1 to 3 percent abundance at depths of 5.5 to 19 inches. Redox features were mostly redox concentrations in the matrix and along pores. o Soil matrix colors were very dark, 2.5Y 2.5/1 and 2.5Y 3/1, which can mask redoximorphic features to some extent. o We noted substantial soil mixing, indicating past disturbance, likely from grading and excavation during the construction of the new wetland. <p>A second test pit in the original wetland had much greater abundance of redox features in the upper 8 inches, up to 5 percent bright redox concentrations as pore linings and soft masses. Neither pit was saturated on January 22, 2013.</p>
--	---

Depth in soil profile, if applicable	5.5 to 19 inches
Year 5 Target:	Redoximorphic features present. Yes.
Year 5 Target Met?	Marginal redox features are present in the created wetland; conclusive redox features are present in the originally delineated wetland area.
Comments	In the last four rain years (beginning July 2011 to July 2015), San Luis County has experienced below average rainfall.

6.0 Actions Required, Timelines, and Follow-up Monitoring

No additional actions are required in the wetland habitat other than occasional weed maintenance.

The upland buffer (brambleberry hedge) requires monitoring until at least the fall of 2016, or until replanted shrubs are self-sustaining. We recommend the following:

- 1) Continue irrigation from planting time through the Fall of 2016, at a minimum.
- 2) Plant 15 additional willow stakes or possibly mule fat in new wetland.
- 3) Control invasive weeds such as teasel, black mustard and yellow star thistle, through regular mowing. Flag desirable plants to avoid mowing desirable native plants.
- 4) Invasive species may be removed by hand or with the appropriate spot-sprayed herbicide during dry season. Yellow star thistle can be treated by a licensed applicator for improved control. Herbicides used **within 25 feet of wetland and waters must be approved for use near aquatic habitats**. If spraying is utilized, ensure that desired species are not damaged.

7.0 Conclusion

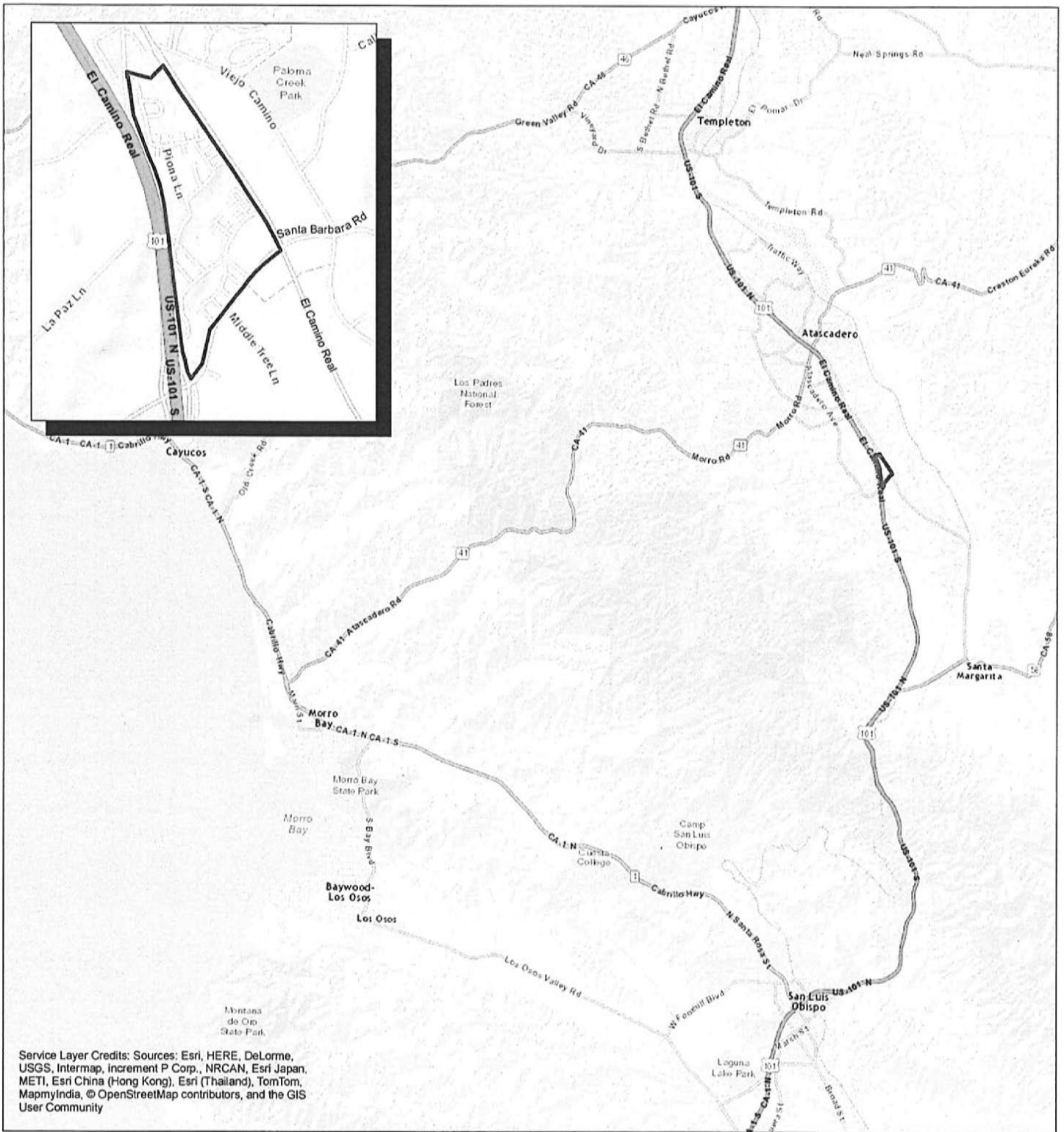
Wetland mitigation is complete. The Corps and Water Board permits required a wetland compensation ratio of at least 1:1 for loss of 110 linear feet of waters and 100 square feet (0.002 acre) of wetland plus a 0.08 acre riparian buffer. The approved mitigation plan called for 0.02 acre of wetland creation.

As of 2015, approximately 0.15 acre of created wetland habitat is self-sustaining—much more than required. The 0.08 acre riparian buffer is healthy on the east side of the federal wetland. In addition, brambleberry hedge planted as part of the permanent open space landscape is healthy and mature on the west side of the federal wetland.

8.0 Figures

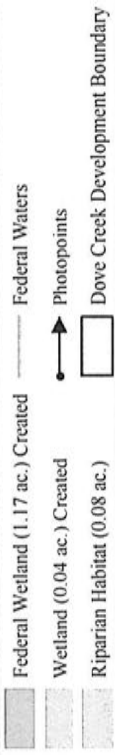
- Figure 1. Location of The Villages at Dove Creek.
- Figure 2. Extent of Federal Wetlands at Dove Creek, 2015

Figure 1. Location Map



 Dove Creek Development Boundary

Figure 2. Extent of CWA Sec. 404 WOUS at Dove Creek



**The Villages at
Dove Creek**

2014 San Luis Obispo County
NAIP Aerial Photography
Map Updated: February 16, 2016, 03:38 PM

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

9.0 References

- Althouse and Meade, Inc. 2006. Mitigation and Monitoring Plan for The Villages at Dove Creek USACE File #28513S Atascadero San Luis Obispo County California. Prepared for Centex Homes. March.
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- Lichvar, Robert W. 2012. The National Wetland Plant List. Army Corps of Engineers, Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH. ERDC/CCREL TR-12-11. October.
- Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands: National Summary. U.S. Fish and Wildlife Service Biological Report 88(24).

Appendix A – Success Criteria and Monitoring Methods

Original text: The site will be monitored during the fall and mid-winter for five years. If the project does not meet success criteria by year five, remediation will be continued and the project monitored until success is met.

SUCCESS CRITERIA AND MONITORING METHODS. Vegetative cover, hydric soils, and wetland plant species were part of the approved Mitigation and Monitoring Plan (Althouse and Meade, Inc. 2006). Willows and riparian buffer were part of the Open Space Management Plan, a City of Atascadero – approved document.

Feature	Performance Criteria	Year 1	Year 2	Year 3	Year 4	Year 5
Hydroseed	vegetative cover	>80%	>90%	>95%	>95%	>95%
Wetland basin	hydric soils	saturated for several weeks	saturated for several weeks	redoximorphic features	redoximorphic features	redoximorphic features
Wetland basin	% cover of wetland species	>50%	>50%	>50%	>55%	>50%
Wetland basin	% cover native species	>50%	>50%	>50%	>50%	>50%
Wetland basin	% vegetative cover	>80%	>80%	>80%	>80%	>80%
Willows	% survival (of 48 planted)	>80%	>75%	>75%	>79%	>70%
Riparian buffer	% survival (of 104 shrubs planted)	>80%	>80%	>75%	>79%	>75%

Redoximorphic features and hydrophytic vegetation met performance criteria in 2013. Willows and riparian buffer were replanted in 2014.

Appendix B – Photos from 2002 to 2015



Photo 1. The Federal Wetland in 2002. View west.



Photo 2. The Federal Wetland on February 3, 2015. View west.



Photo 3. The brambleberry hedge in the wetland after planting roses and blackberry. October 19, 2006. View north.



Photo 4. The brambleberry hedge in the wetland on April 14, 2015. View north.



Photo 5. The Federal Wetland in December 2005. View southeast.



Photo 6. The Federal Wetland on April 8, 2015. View southeast.



Photo 7. Additional material was planted along the brambleberry hedge in August of 2014, and mulch was added to the plants. August 4, 2014. View southeast.



Photo 8. The brambleberry hedge on September 3, 2015. View south.



Photo 9. The area adjacent to the North Fork Paloma ephemeral creek prior to the formation of a new wetland. March 26, 2008. View south.



Photo 10. The area adjacent to the North Fork Paloma ephemeral creek after creation of a new wetland. September 3, 2015. View south. September 3, 2015



Photo 11. [REDACTED] dig the first of two wetland pits in the Federal wetland April 14, 2015 to verify presence of hydric soil.

Appendix C – USACE Permit Authorization 28513S_2005



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

APR 14 2005

Regulatory Branch

SUBJECT: File Number 28513S

Mr. [REDACTED]
Bermant Development Company
5383 Hollister Avenue, Suite 150
Santa Barbara, California 93111

Dear Mr. [REDACTED]

This letter is in reference to your submittal of January 6, 2004, requesting Department of the Army authorization to build a 64-acre residential and commercial development, "The Villages at Dove Creek," located between Highway 101 and El Camino Real, north of Santa Barbara Road, south of San Diego Road, in the City of Atascadero, San Luis Obispo County, California.

Based on a review of the information you submitted, your project qualifies for authorization under Department of the Army Nationwide Permit Nationwide Permit 14 - Linear Transportation Projects (67 Fed. Reg. 2020, January 15, 2002), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). See Enclosure 1. All work shall be completed in accordance with the attached plans and drawings titled "USACE File # 28513S - The Villages at Dove Creek" and dated April 6, 2005.

Two Corps jurisdictional streams cross the property, Paloma Creek and North Fork Paloma Creek, and a 1.63-acre bulrush series seasonal wetland is located adjacent to the latter creek. El Camino Real crosses both creeks and will be widened per City of Atascadero requirements, resulting in extensions of the existing box culverts. These culvert extensions will permanently impact an approximate total of 110 linear feet along the banks of the two streams, with the addition of concrete to the four banks. The culvert extensions will also result in the loss of approximately 100 square feet of seasonal wetlands at the crossing of North Fork Paloma Creek. Within the interior of the development parcel, approximately 300 linear feet along both streams will be temporarily impacted with the addition of fill associated with providing access to the site during grading activities. To compensate for the loss of wetlands, the existing wetland will be expanded 100 square feet by excavating a narrow strip outside the southeast bank. The excavated area will be replanted with native wetland species.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance,

Enclosure 3, verifying that you have complied with the terms and conditions of the permit. Non-compliance with any condition could result in the revocation, suspension or modification of the authorization for your project, thereby requiring you to obtain an individual permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid until March 18, 2007, unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit.

To ensure compliance with the Nationwide Permit, the following special conditions shall be implemented:

1. To compensate for the loss of wetlands, the existing wetland will be expanded 100 square feet by excavating a narrow strip outside the southeast bank. The excavated area will be replanted with native wetland species.
2. The culvert extension activities and the excavation activities associated with expanding the wetland will occur only when the project sites are dry (typically April 1 to November 1, annually) with no standing water in or in the vicinity of the proposed work areas. In addition, temporary crossings will be constructed and used only when the two creeks are dry.
3. A biologist with demonstrable knowledge in California red-legged frog biology and identification will conduct pre-construction surveys for California red-legged frogs prior to the initiation of any ground disturbance activities and only after it has been determined that the disturbance areas are dry. This biologist will provide training to contractors on California red-legged frogs and their habitats prior to initiation of the construction activities. The biologist will also oversee site preparation and all earth-moving activities during construction of the culverts and the excavation activities associated with expanding the wetland.
4. This permit **does not** authorize the relocation of California red-legged frogs. If a California red-legged frog or other federally listed species is found during any of the construction activities in the wetland and riparian areas, or if the project changes in any manner that may affect federally listed species, the U.S. Fish and Wildlife Service must be contacted immediately to determine whether additional consultation or a section 10(a)(1)(B) permit is required.

5. Post-construction and prior to occupancy, the two creeks and seasonal wetland will be permanently fenced off to keep humans and pets out of these habitats. The fencing will provide an average riparian buffer of 35 feet. The riparian buffer created by the fencing will not be less than 20 feet at any point.
6. Construction erosion control measures will be implemented to prevent runoff into the wetland. A stormwater pollution prevention plan will include measures to prevent sediment from entering the wetlands.
7. During construction, fencing will be installed that identifies the wetland as a sensitive habitat area.
8. An annual monitoring report shall be submitted to the Corps by December 31 for five years following the completion of construction. If the project is completed during the 2005 year, the first report will be due December 31, 2006. This report shall include dated photographs that cover the entire project reach.
9. This permit will not be valid until a Final Wetland Mitigation and Monitoring Plan has been approved by the Corps.

Should you have any questions regarding this matter, please call Holly Costa of our Regulatory Branch at 415-977-8438. Please address all correspondence to the Regulatory Branch and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available through the Forms and Contacts Block on our website: www.spn.usace.army.mil/regulatory/


Sincerely,



Edward A. Wylie
Chief, South Section

Enclosures

Copy Furnished:

Althouse and Meade, Paso Robles, CA Attn: 

Copy Furnished (w/o enclosures):

CA DFG, Monterey, CA Attn: Mike Hill

CA RWQCB, San Luis Obispo, CA Attn: Mike Louther

US FWS, Ventura, CA



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

APR 14 2005

Regulatory Branch

SUBJECT: File Number 28513S

Mr. [REDACTED]
Bermant Development Company
5383 Hollister Avenue, Suite 150
Santa Barbara, California 93111

Dear Mr. [REDACTED]

This letter is in reference to your submittal of January 6, 2004, requesting Department of the Army authorization to build a 64-acre residential and commercial development, "The Villages at Dove Creek," located between Highway 101 and El Camino Real, north of Santa Barbara Road, south of San Diego Road, in the City of Atascadero, San Luis Obispo County, California.

Based on a review of the information you submitted, your project qualifies for authorization under Department of the Army Nationwide Permit Nationwide Permit 14 - Linear Transportation Projects (67 Fed. Reg. 2020, January 15, 2002), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). See Enclosure 1. All work shall be completed in accordance with the attached plans and drawings titled "USACE File # 28513S - The Villages at Dove Creek" and dated April 6, 2005.

Two Corps jurisdictional streams cross the property, Paloma Creek and North Fork Paloma Creek, and a 1.63-acre bulrush series seasonal wetland is located adjacent to the latter creek. El Camino Real crosses both creeks and will be widened per City of Atascadero requirements, resulting in extensions of the existing box culverts. These culvert extensions will permanently impact an approximate total of 110 linear feet along the banks of the two streams, with the addition of concrete to the four banks. The culvert extensions will also result in the loss of approximately 100 square feet of seasonal wetlands at the crossing of North Fork Paloma Creek. Within the interior of the development parcel, approximately 300 linear feet along both streams will be temporarily impacted with the addition of fill associated with providing access to the site during grading activities. To compensate for the loss of wetlands, the existing wetland will be expanded 100 square feet by excavating a narrow strip outside the southeast bank. The excavated area will be replanted with native wetland species.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance,

Enclosure 3, verifying that you have complied with the terms and conditions of the permit. Non-compliance with any condition could result in the revocation, suspension or modification of the authorization for your project, thereby requiring you to obtain an individual permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid until March 18, 2007, unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit.

To ensure compliance with the Nationwide Permit, the following special conditions shall be implemented:

1. To compensate for the loss of wetlands, the existing wetland will be expanded 100 square feet by excavating a narrow strip outside the southeast bank. The excavated area will be replanted with native wetland species.
2. The culvert extension activities and the excavation activities associated with expanding the wetland will occur only when the project sites are dry (typically April 1 to November 1, annually) with no standing water in or in the vicinity of the proposed work areas. In addition, temporary crossings will be constructed and used only when the two creeks are dry.
3. A biologist with demonstrable knowledge in California red-legged frog biology and identification will conduct pre-construction surveys for California red-legged frogs prior to the initiation of any ground disturbance activities and only after it has been determined that the disturbance areas are dry. This biologist will provide training to contractors on California red-legged frogs and their habitats prior to initiation of the construction activities. The biologist will also oversee site preparation and all earth-moving activities during construction of the culverts and the excavation activities associated with expanding the wetland.
4. This permit **does not** authorize the relocation of California red-legged frogs. If a California red-legged frog or other federally listed species is found during any of the construction activities in the wetland and riparian areas, or if the project changes in any manner that may affect federally listed species, the U.S. Fish and Wildlife Service must be contacted immediately to determine whether additional consultation or a section 10(a)(1)(B) permit is required.

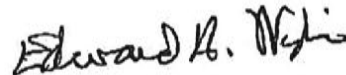
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5. Post-construction and prior to occupancy, the two creeks and seasonal wetland will be permanently fenced off to keep humans and pets out of these habitats. The fencing will provide an average riparian buffer of 35 feet. The riparian buffer created by the fencing will not be less than 20 feet at any point.
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Sincerely,



Edward A. Wylie
Chief, South Section

Enclosures

ALTHOUSE AND MEADE, INC.

BIOLOGICAL AND ENVIRONMENTAL SERVICES

1875 Wellsona Road • Paso Robles, CA 93446 • Telephone (805) 467-1041 • Fax (805) 467-1021

Lynne Dee Althouse, M.S.
(805) 459-1660 (cell)
lynnedec@althouseandmeade.com

February 9, 2006
433.04

Daniel E. Meade, Ph.D.
(805) 705-2479 (cell)
dan@althouseandmeade.com

Holly Costa, Project Manager
U.S. Army Corps of Engineers
333 Market Street, 16th Floor
San Francisco, CA 94105-2197

Re: Dove Creek, Atascadero, San Luis Obispo County – Corps #28513S

Dear Holly:

Dove Creek Development was previously owned by Bermant Development. The property is now owned and operated by Centex Homes.

<p>Bermant Development 5383 Hollister Ave. Suite 150 Santa Barbara, CA 93111 Contact: [REDACTED] Phone 805-461-3145 FAX 805-462-8476 Santa Barbara FAX 805-692-5075</p> <p>Signature: [REDACTED]</p> <p>Title: <u>Project Manager</u></p> <p>Date: <u>2/23/06</u></p>	<p>Centex Homes 735 Tank Farm Rd., Suite 100 San Luis Obispo, CA 93401 Contact: [REDACTED] Phone 805-548-0333; cell 431-2037 FAX 805-548-0444</p> <p>Signature: [REDACTED]</p> <p>Title: <u>Land Development Manager</u></p> <p>Date: <u>3/1/06</u></p>
--	--

Please change the records in you files.

Sincerely,

Copy: [REDACTED]

*Maked orig
3/3/06 USAPO*

Right- This is a spring within the Dove Creek Community located near the north end of the development, this supply was flowing freely out of the ground and creating a habitat for young frogs.

Below: One of many young frogs found in the moist reclamation areas between the landscape and the wetlands.





Left- Near the spring, many young frogs living in the cattails and reeds. I have circled in blue some of the frogs that I was able to capture in this photo.

Below- Another young frog amongst the reeds in a damp area near the north end of the community. Many frogs were present, just very hard to photograph.

